

January 16, 2015

**NOTICE INVITING FOR PRE-QUALIFICATION**

Notice is hereby given that a questionnaire to "pre-qualify" for the right to bid for the construction of the **Chevy Chase Sewer Diversion Project** will be received by the City of Glendale Public Works Department, Engineering Division at their office located at 633 E. Broadway, Room 205, Glendale, CA 91206 at or before 5:00 pm on February 11, 2015.

**Project Description for the Chevy Chase Sewer Diversion:**

The project involves the construction of approximately 4,300 linear feet of gravity sewer pipeline by combination of trenchless and open-cut trenching methods starting at the connection point at the City's owned sewer main in Colorado Boulevard in the City of Los Angeles, and going upstream to the existing manhole adjacent to 541 W. Chevy Chase Drive, in the City of Glendale. See the attached Project Location Map. A depth of sewer pipe varies from 27 feet to 42 feet in a trenchless section and 14 feet to 27 feet in open-cut trenching section. The general scope of work includes and is not limited to:

- Installation of 36" and 48" sewer pipes inside 48-inch and 68-inch steel casing by trenchless method from and through Colorado Boulevard at San Fernando Road, crossing under the Metrolink railroad tracks to intersection of Elk Avenue and San Fernando, then south on San Fernando Road to San Fernando Road/Los Angeles Street intersection.
- Installation of 54" HDPE sewer pipe by open-cut trenching in Colorado Boulevard
- Installation of 36" vitrified clay sewer pipe by open-cut trenching from San Fernando Road and Los Angeles Street intersection, south on Los Angeles Street, east on Garfield Avenue, and south through the Public Works Yard to the existing manhole adjacent to 541 W. Chevy Chase Drive
- Construction of the large shafts for jacking and receiving pits to install trenchless equipment, future sewer manholes and sewer metering vault/flume.
- Connection of the existing service laterals
- Sewer and water main bypass
- Removal of existing sewer manholes and sewer mains
- Utility pipe support
- Dewatering, if necessary

The engineer's preliminary estimate for the project is approximately \$10,000,000. The start of construction is anticipated to begin in July 2015.

A pre-qualification questionnaire can be obtained from the City of Glendale by calling (818) 937-8255. The pre-qualification questionnaire shall be completed and enclosed in an envelope, sealed and clearly labeled with project title and name of contractor. Contractors seeking "pre-qualification" shall have an active Class A license within the State of California and shall be qualified with a minimum of ten (10) years of experience as the submitting entity in sewer improvements projects.

In order to be considered for "pre-qualification" on this project, contractors shall include the following information within the pre-qualification questionnaire:

Contractor has performed at least one projects from each of the three (3) categories defined in Part A below and at least one projects from three (3) of the five (5) categories defined in Part B below of similar size and scope of this proposed project, at least two (2) of which shall be for Cities or Counties.

**A. PROJECT WHERE TUNNELING FOR GRAVITY WASTEWATER PIPELINES USING OPEN SHIELD PIPE JACKING WAS PART OF THE CONTRACTOR'S CONTRACT:**

1. Project involving a minimum of 3,000 linear feet of open shield pipe jacking tunneling to install steel casing between 48-inch and 68-inch with HDPE or Hobas material sewer carrier pipe inside the steel casing.
2. One of the referenced projects shall have successfully completed at least a 1,000 continuous feet drive between shafts using open shield pipe jacking to install a casing for a sewer at or near minimum grade and include the installation of a carrier pipe of HDPE or Hobas materials of at least 36-inch diameter.
3. Project involving tunneling construction in the public right-of-way and crossing railroad tracks subject to ARENA rules and permitting requirements will be favorably considered.

Projects must have been completed by the Contractor, or by a subcontractor under the direct supervision of, and with a written agreement with the Contractor. The Contractor shall list who performed the pipeline tunneling construction work, whether self-performed or by a subcontractor under the Contractor's direction, on the forms provided in Part IV, herein. If the work was performed by a subcontractor, that subcontractor must be performing the work under the direct supervision of, and with a written agreement with, the Contractor on this project in order for the project to be accepted as qualifying experience.

**B. PROJECT WHERE SITE CIVIL WORK FOR THE WASTEWATER PIPELINES WAS PART OF THE CONTRACTOR'S CONTRACT:**

1. Project involving a minimum of 3,000 linear feet of fusion welded HDPE or normally jointed Hobas pipe for tunnel installation inside of a steel casing of 36 inch diameter or larger was installed.

2. Project involving shaft construction, stringing of pipe, staging, excavation, trenching , backfilling, grading to install steel casing between 48-inch and 68-inch steel casing and HDPE or Hobas material sewer carrier pipe within difficult and restricted site access associated with congested streets and thoroughfares, will be favorable considered.
3. Tunneling that has been constructed in dense sands and gravels and other similar ground conditions will be favorably considered.
4. Projects indicating the contractor's ability to construct underground pipeline systems requiring hand mining and open shield pipe jacking under obstructions including concrete structures and utilities, will be favorably considered.
5. Projects involving reinforced cast-in-place concrete work, including entrance and exit shafts, manholes, drop structures, flow metering structures and systems, pipe grouting encasements, diversion structures and/or air treatment facilities (ATFs), will be favorably considered.

Projects must have been completed by the Contractor, or by a subcontractor under the direct supervision of, and with a written agreement with, the Contractor. The Contractor shall list who performed the tunneling work using open shield pipe jacking and carrier pipeline (HDPE or Hobas) construction work, whether self-performed or by a subcontractor under the Contractor's direction, on the forms provided in Part III herein. If the work was performed by a subcontractor, that subcontractor must be performing the work under the direct supervision of, and with a written agreement with, the Contractor on this project in order for the project to be accepted as qualifying experience.

Contractor can include project(s) currently under construction, but the Owner(s) must have paid the Contractor more than 75% of the original contract amount by December 30, 2014 on uncompleted project(s).

Contractor shall obtain permits from SCRRA, the City of Los Angeles Bureau of Engineering, Los Angeles County and OSHA.

The City will apply a uniform system of rating pre-qualification respondents on objective criteria consistent with Department of Industrial Relations recommendations, on the basis of the completed questionnaire, financial statements, and references to determine the qualified bidders list. Only the top eight (8) passing scores will be determined pre-qualified, or the top 30% of any received prequalification statements.

The City may refuse to grant pre-qualification where the requested information is incomplete or not received by the deadline for submission. There is no appeal process of the refusal for an incomplete or late application.

Only where a timely and completed application results in a rating below that necessary to pre-qualify, an appeal can be made. An appeal begins when the Contractor delivers notice to the City of its appeal of the decision with respect to its pre-qualification rating, no later than ten business

days after the Notice of Determination is issued. Without a timely appeal, the Contractor waives any and all rights to challenge the decision of the City, whether by administrative process, judicial process, or any other legal process or proceeding.

If the Contractor gives the required notice of appeal and requests a hearing, the hearing shall be conducted so that it is concluded within fourteen business days after the City's receipt of the notice of appeal. The hearing shall be an informal process conducted by a panel to which the City has delegated responsibility to hear such appeals (the "Appeals Panel"). At or prior to the hearing, the Contractor will be advised of the basis for the City's pre-qualification determination. The Contractor will be given the opportunity to present information and present reasons in opposition to the rating. After the conclusion of the hearing, the Appeals Panel will render its decision. It is the intention of the City that the date for the submission and opening of bids for the project will not be delayed or postponed to allow for completion of an appeal process.

The questionnaire and financial statements shall not be public records and shall not be open to public inspection; however, records of the names of the contractors applying for pre-qualification status shall be public records subject to disclosure.

The information given by contractors seeking pre-qualification is provided with the understanding that the intentional providing of false information is grounds for disqualification.

Contact Jasmina Zigic, Project Manager at (818) 937-8255 with any questions regarding this Pre-Qualification questionnaire.



BY ORDER OF ROUBIK R. GOLANIAN, P.E.,

DIRECTOR OF PUBLIC WORKS

Attachments:

1. Contractor's Pre-qualification Questionnaire
2. Project Location Map
3. Preliminary Bidding Quantities (not for bidding)
4. SCRRRA Form 6 Insurance Requirements, Exhibit A
5. City of Glendale Insurance Requirements, General Condition Exhibit 4
6. Preliminary Plan No. 3-1561 (Colorado Blvd Wastewater Improvement Project, Full Size 2'x3, Not for construction )
7. Preliminary Plan No. 3-1551 (Chevy Chase Sewer Diversion Project, Full Size 2'x3; not for construction)





---

(Fill in Contractor's Name)

**CONTRACTOR'S PRE-QUALIFICATION  
QUESTIONNAIRE  
FOR THE CHEVY CHASE SEWER DIVERSION  
PROJECT**

**January 2015**

**CITY OF GLENDALE, CALIFORNIA**

Public Works Department, Engineering Division

633 E. Broadway, Room 205

Glendale, CA 91206-4388

Telephone: (818) 548-3945 Facsimile: (818) 242-7087

Project Manager: Jasmina Zigic

Email: [jzigic@glendaleca.gov](mailto:jzigic@glendaleca.gov)

## **TABLE OF CONTENTS**

### **CONTRACTOR'S PRE-QUALIFICATION QUESTIONNAIRE FOR THE**

### **CHEVY CHASE SEWER DIVERSION PROJECT**

<b>CONTRACTOR'S PRE-QUALIFICATION QUESTIONNAIRE .....</b>	<b>Page</b>
APPLICANT INFORMATION .....	1
PART I - ESSENTIAL REQUIREMENTS .....	2
PART II - HISTORY OF BUSINESS AND ORGANIZACIONAL PERFORMANCE .....	4
PART III – SAFETY, WORKERS COMPENSATION, PRE-WAILING WAGES .....	6
PART IV – PROJECT EXPERIENCE (GENERAL CONTRACTOR) .....	8
PART V – PROJECT EXPERIENCE (SUBCONTRACTOR) .....	11

#### **ATTACHMENTS**

1. Project Location Map
2. Bidding Quantities - Preliminary
3. SCRRRA Form 6, Insurance Requirements, Exhibit A
4. City of Glendale Insurance Requirements, General Condition Exhibit 4
5. Preliminary Plan No. 3-1561 (Colorado Blvd Wastewater Improvement Project)
6. Preliminary Plan No. 3-1561 (Chevy Chase Sewer Diversion Project)

**Contractor's Questionnaire for the Pre-Qualification to Bid**

**For the construction of the**

**CHEVY CHASE SEWER DIVERSION PROJECT**

**APPLICANT INFORMATION**

**CONTACT INFORMATION**

Firm Name: \_\_\_\_\_  
(as it appears on license)

Check One: ☐ Corporation  
☐ Partnership  
☐ Sole Prop  
☐ Other

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

If firm is a sole proprietor or partnership:

Owner(s) of Company: \_\_\_\_\_

Contractor's License Number(s):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I, the undersigned, certify and declare that I have read all the foregoing answers to this prequalification questionnaire and know their contents. The matters stated in the questionnaire answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California, that the foregoing is correct.

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Name)

## PART I ESSENTIAL REQUIREMENTS FOR PRE-QUALIFICATION

**Contractor will be immediately disqualified if the answer to any of questions 1 through 5 is “no.”<sup>1</sup>**

**Contractor will be immediately disqualified if the answer to any of questions 6, 7, 8 or 9 is “yes.”<sup>2</sup> If the answer to question 8 is “yes,” and if debarment would be the sole reason for denial of pre-qualification, any pre-qualification issued will exclude the debarment period.**

1. Contractor possesses a valid and current California Contractor’s license for the project or projects for which it intends to submit a bid.  
☐ Yes ☐ No
2. Contractor has liability insurance with a combined minimum single policy limit per occurrence of \$2,000,000 for both Comprehensive and Broad Form General Liability.  
☐ Yes ☐ No (Submit letter confirming)
3. Contractor has current workers’ compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code section 3700 et. seq.  
☐ Yes ☐ No ☐ Contractor is exempt from this requirement, because it has no employees. (Submit letter confirming)
4. Have you attached a copy of last two years of a reviewed or audited financial statement with accompanying notes and supplemental information? <sup>1 3</sup>  
☐ Yes ☐ No

NOTE: A financial statement must be either reviewed or audited to be acceptable. A letter verifying availability of a line of credit may also be attached; however, it will be considered as supplemental information only, and is not a substitute for the required financial statement.

5. Have you attached a notarized statement from an admitted surety insurer (approved by the California Department of Insurance) and authorized to issue bonds in the State of California, which states: (a) that your current bonding capacity is sufficient for the project for which you seek pre-qualification if you are seeking pre-qualification for a single project; or (if you are seeking pre-qualification valid for a year) (b) your current available bonding capacity? <sup>4</sup>  
☐ Yes ☐ No

**NOTE: Notarized statement must be from the surety company, not an agent or broker.**

6. Has your contractor’s license been revoked at any time in the last five years? <sup>2</sup>  
☐ Yes ☐ No



7. Has a surety firm completed a contract on your behalf, or paid for completion because your firm was default terminated by the project owner within the last five (5) years? <sup>2</sup>  
☐ Yes ☐ No
8. At the time of submitting this pre-qualification form, is your firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract from any jurisdiction or agency, pursuant to either Labor Code section 1777.1 or Labor Code section 1777.7?  
☐ Yes ☐ No  
If the answer is "Yes," state the beginning and ending dates of the period of debarment:  
\_\_\_\_\_
9. At any time during the last five years, has your firm or any of its owners or officers been convicted of a crime involving the awarding of a contract of a government construction project, or the bidding or performance of a government contract? <sup>2</sup>  
☐ Yes ☐ No

<sup>1</sup> A "no" answer to question 4 will not be disqualifying if the contractor is exempt from complying with question 4, for reasons explained in footnote 3.

<sup>2</sup> A contractor disqualified solely because of a "yes" answer given to question 6, 7, or 9 may appeal the disqualification and provide an explanation for the relevant circumstances during the appeal procedure.

<sup>3</sup> Public contract Code section 20101(3) exempts from this requirement a contractor who has qualified as a small business pursuant to Government Code section 14837(d)(1), if the bid is "no more than 25 percent of the qualifying amount provided in section 14837(d)(1)." As of January 1, 2001, the qualifying amount is \$10 million, and 25 percent of that amount, therefore, is \$2.5 million.

<sup>4</sup> An additional notarized statement from the surety may be requested by *Public Entity* at the time of submission of a bid, if this pre-qualification package is submitted more than 60 days prior to submission of the bid.

## PART II HISTORY OF THE BUSINESS AND ORGANIZANTIONAL PERFORMANCE

1. How many years has your organization been in business in California as a contractor under your present business name and license number? \_\_\_\_ Years
2. What is the average annual construction work done by your organization?  
\$ \_\_\_\_\_
3. What is the current backlog of work in your organization? Provide the names of the project with their costs on a separate sheet of project.
4. Is your firm currently the debtor in a bankruptcy case?  
☐ Yes ☐ No
5. Was your firm in bankruptcy any time during the last five years? (This question refers only to a bankruptcy action that was not described in answer to question 7, above).  
☐ Yes ☐ No
6. Has any CSLB license held by your firm or its Responsible Managing Employee (RME) or Responsible Managing Officer (RMO) been suspended within the last five years?  
☐ Yes ☐ No
7. At any time in the last five years, has your firm been assessed and paid liquidated damages after completion of a project, under a construction contract with either a public or private owner?  
☐ Yes ☐ No If "Yes", list how many days per contract:\_\_\_\_\_.
8. In the last five years has your firm, or any firm with which any of your company's owners, officers or partners was associated, been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any government agency or public works project for any reason?  
☐ Yes ☐ No

**NOTE: "Associated with" refers to another construction firm in which an owner, partner or officer of your firm held a similar position, and which is listed in response to question 1c or 1d on this form.**

9. In the last five years, has your firm been denied an award of a public works contract based on a finding by a public agency that your company was not a responsible bidder?  
☐ Yes ☐ No

Question No. 8 and No. 9 refer only to disputes between your firm and the owner of a project. You **need not** include information about disputes between your firm and a supplier, another contractor, or subcontractor. **You need not** include information about "pass-through" disputes in which the actual dispute is between a sub-contractor and a project owner. Also, you may omit reference to all disputes about amounts of less than \$25,000.

10. In the past five years, has any claim **against** your firm concerning your firm's work on a construction project, been **filed in court or arbitration**? List project/claim and amount for each.
- ☐ Yes      ☐ No
11. In the past five years, has your firm made any claim against a project owner concerning work on a project or payment for a contract, and **filed that claim in court or arbitration**? List project/claim and amount for each.
- ☐ Yes      ☐ No
12. At any time during the past five years, has any surety company made any payments on your firm's behalf as a result of a default, to satisfy any claims made against a performance or payment bond issued on your firm's behalf in connection with a construction project, either public or private?
- ☐ Yes      ☐ No
13. In the last five years, has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm?
- ☐ Yes      ☐ No
14. Has your firm or any of its owners, officers, or partners ever been found liable in a civil suit, or found guilty in a criminal action, for making any false claim or material misrepresentation to any public agency or entity?
- ☐ Yes      ☐ No
15. Has your firm or any of its owners, officers or partners ever been convicted of a crime involving any federal, state, or local law related to construction?
- ☐ Yes      ☐ No
16. Has your firm or any of its owners, officers or partners ever been convicted of a federal or state crime of fraud, theft, or any other act of dishonesty?
- ☐ Yes      ☐ No
17. If your firm was required to pay a premium of more than one per cent for a performance and payment bond on any project(s) on which your firm worked at any time during the last three years, state the percentage that your firm was required to pay. You may provide an explanation for a percentage rate higher than one per cent, if you wish to do so.
- \_\_\_\_\_ %
18. During the last five years, has your firm ever been denied bond credit by a surety company, or has there ever been a period of time when your firm had no surety bond in place during a public construction project when one was required?
- ☐ Yes      ☐ No

### PART III COMPLIANCE WITH CIVIL AND CRIMINAL LAW (SAFETY, WORKERS COMPENSATION, PREVAILING WAGE AND APPRENTICESHIP LAWS)

1. Has CAL OSHA cited and assessed penalties against your firm for any “serious,” “willful” or “repeat” violations of its safety or health regulations in the past seven years?  
☐ Yes ☐ No

Note: If you have filed an appeal of a citation and the Occupational Safety and Health Appeals Board has not yet ruled on your appeal, you need not include information about it.

2. Has the federal Occupational Safety and Health Administration cited and assessed penalties against your firm in the past five years?  
☐ Yes ☐ No

If yes, attach a separate signed page describing each citation.

Note: If you have filed an appeal of a citation and the appropriate Appeals Board has not yet ruled on your appeal, you need not include information about it.

3. Has the EPA or any Air Quality Management District or any Regional Water Quality Control Board cited and assessed penalties against either your firm or the owner of a project on which your firm was the contractor, in the past five years?  
☐ Yes ☐ No

NOTE: If you have filed an appeal of a citation and the appropriate Appeals Board has not yet ruled on your appeal, or if there is a court appeal pending, you need not include information about it.

4. How often do you require documented safety meetings to be held for construction employees and field supervisors during the course of a project?  
\_\_\_\_\_

5. List your firm’s Experience Modification Rate (EMR) (California workers’ compensation insurance) for each of the past three premium years:

Current year: \_\_\_\_\_

Previous year: \_\_\_\_\_

Year prior to previous year: \_\_\_\_\_

If your EMR for any of these three years is or was 1.00 or higher, you may, if you wish, attach a letter of explanation.

NOTE: An Experience Modification Rate is issued to your firm annually by your workers’ compensation insurance carrier.

6. Within the last five years, has there ever been a period when your firm had employees but was without workers’ compensation insurance or state-approved self-insurance?  
☐ Yes ☐ No

7. Has there been more than one occasion during the last five years on which your firm was required to pay either back wages or penalties for your own firm’s failure to comply with the **state’s** prevailing wage laws?

☐ Yes      ☐ No      If "Yes", how many occasions?\_\_\_\_\_.

NOTE: This question refers only to your own firm's violation of prevailing wage laws, not to violations of the prevailing wage laws by a subcontractor.

8. During the last five years, has there been more than one occasion on which your own firm has been penalized or required to pay back wages for failure to comply with the **federal** Davis-Bacon prevailing wage requirements?

☐ Yes      ☐ No      If "Yes", how many occasions?\_\_\_\_\_.

9. Provide the **name, address and telephone number** of the apprenticeship program sponsor(s) (approved by the California Division of Apprenticeship Standards) that will provide apprentices to your company for use on any public work project for which you are awarded a contract by *[Public Entity]*.

\_\_\_\_\_  
\_\_\_\_\_

10. If your firm operates its own State-approved apprenticeship program:

- a. Identify the craft or crafts in which your firm provided apprenticeship training in the past year.
- b. State the year in which each such apprenticeship program was approved, and attach evidence of the most recent California Apprenticeship Council approval(s) of your apprenticeship program(s).
- c. State the number of individuals who were employed by your firm as apprentices at any time during the past three years in each apprenticeship and the number of persons who, during the past three years, completed apprenticeships in each craft while employed by your firm.

11. At any time during the last five years, has your firm been found to have violated any provision of California apprenticeship laws or regulations, or the laws pertaining to use of apprentices on public works?

☐ Yes      ☐ No.

If yes, provide the date(s) of such findings, and attach copies of the Department's final decision(s).

NOTE: You may omit reference to any incident that occurred prior to January 1, 1998 if the violation was by a subcontractor and your firm, as general contractor on a project, had no knowledge of the subcontractor's violation at the time they occurred.

#### **PART IV PROJECT EXPERIENCE (Prime Contractor)**

The Contractor shall provide information relating to three (3) sewer improvement projects of similar size and scope as this proposed project (minimum \$6 million value) completed within the last seven (7) years. At least two (2) projects must be for cities or counties. Names and references must be current and verifiable.

Project #1 Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

\_\_\_\_\_  
Owner's Representative Name and Current Phone No:

Architect/Engineer: \_\_\_\_\_

\_\_\_\_\_  
Architect/Engineer Name and Phone No.:

\_\_\_\_\_  
On-Site Construction Manager Name and Phone No:

Construction Bid Cost: \$ \_\_\_\_\_

Final Construction Cost: \$ \_\_\_\_\_

Total Value of Change Orders: \_\_\_\_\_

Original Construction Contract Duration: \_\_\_\_\_ (Working Days)

Original Contract Completion Date: \_\_\_\_\_

Actual Date of Completion: \_\_\_\_\_

Scope of Work Performed: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Length of the Project. \_\_\_\_\_

List the Subcontractors. \_\_\_\_\_

List the Equipment Manufacturers and Supplier \_\_\_\_\_

List Special Construction Method \_\_\_\_\_



## PROJECT EXPERIENCE (Prime Contractor)

Project #2 Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

\_\_\_\_\_  
Owner's Representative Name and Current Phone No:

Architect/Engineer: \_\_\_\_\_

\_\_\_\_\_  
Architect/Engineer Name and Phone No.:

\_\_\_\_\_  
On-Site Construction Manager Name and Phone No:

Construction Bid Cost: \$ \_\_\_\_\_

Final Construction Cost: \$ \_\_\_\_\_

Total Value of Change Orders: \_\_\_\_\_

Original Construction Contract Duration: \_\_\_\_\_ (Working Days)

Original Contract Completion Date: \_\_\_\_\_

Actual Date of Completion: \_\_\_\_\_

Scope of Work Performed: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Length of the Project. \_\_\_\_\_

List the Subcontractors. \_\_\_\_\_

List the Equipment Manufacturers and Supplier \_\_\_\_\_

List Special Construction Method \_\_\_\_\_

## PROJECT EXPERIENCE (Prime Contractor)

Project #3 Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

\_\_\_\_\_  
Owner's Representative Name and Current Phone No:

Architect/Engineer: \_\_\_\_\_

\_\_\_\_\_  
Architect/Engineer Name and Phone No.:

\_\_\_\_\_  
On-Site Construction Manager Name and Phone No:

Construction Bid Cost: \$ \_\_\_\_\_

Final Construction Cost: \$ \_\_\_\_\_

Total Value of Change Orders: \_\_\_\_\_

Original Construction Contract Duration: \_\_\_\_\_ (Working Days)

Original Contract Completion Date: \_\_\_\_\_

Actual Date of Completion: \_\_\_\_\_

Scope of Work Performed: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Length of the Project. \_\_\_\_\_

List the Subcontractors. \_\_\_\_\_

List the Equipment Manufacturers and Supplier \_\_\_\_\_

List Special Construction Method \_\_\_\_\_

## **PART V PROJECT EXPERIENCE (Trenchless Sub- Contractor)**

The Sub-contractor shall provide information about three (3) sewer improvement projects of similar size and scope as this proposed project (minimum \$4 million value) completed within the last seven (7) years. At least two (2) projects must be for cities or counties. Names and references must be current and verifiable.

Project #1 Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

\_\_\_\_\_  
Owner's Representative Name and Current Phone No:

Architect/Engineer: \_\_\_\_\_

\_\_\_\_\_  
Architect/Engineer Name and Phone No.:

\_\_\_\_\_  
On-Site Construction Manager Name and Phone No:

Construction Bid Cost: \$ \_\_\_\_\_

Final Construction Cost: \$ \_\_\_\_\_

Total Value of Change Orders: \_\_\_\_\_

Original Construction Contract Duration: \_\_\_\_\_ (Working Days)

Original Contract Completion Date: \_\_\_\_\_

Actual Date of Completion: \_\_\_\_\_

Scope of Work Performed: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Length of the Project. \_\_\_\_\_

List the Subcontractors. \_\_\_\_\_

List the Equipment Manufacturers and Supplier \_\_\_\_\_

List Special Construction Method \_\_\_\_\_

## PROJECT EXPERIENCE (Trenchless Sub- Contractor)

Project #2 Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

\_\_\_\_\_  
Owner's Representative Name and Current Phone No:

Architect/Engineer: \_\_\_\_\_

\_\_\_\_\_  
Architect/Engineer Name and Phone No.:

\_\_\_\_\_  
On-Site Construction Manager Name and Phone No:

Construction Bid Cost: \$ \_\_\_\_\_

Final Construction Cost: \$ \_\_\_\_\_

Total Value of Change Orders: \_\_\_\_\_

Original Construction Contract Duration: \_\_\_\_\_ (Working Days)

Original Contract Completion Date: \_\_\_\_\_

Actual Date of Completion: \_\_\_\_\_

Scope of Work Performed: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Length of the Project. \_\_\_\_\_

List the Subcontractors. \_\_\_\_\_

List the Equipment Manufacturers and Supplier \_\_\_\_\_

List Special Construction Method \_\_\_\_\_

## PROJECT EXPERIENCE (Trenchless Sub-Contractor)

Project #3 Name: \_\_\_\_\_

Location: \_\_\_\_\_

Owner: \_\_\_\_\_

\_\_\_\_\_  
Owner's Representative Name and Current Phone No:

Architect/Engineer: \_\_\_\_\_

\_\_\_\_\_  
Architect/Engineer Name and Phone No.:

\_\_\_\_\_  
On-Site Construction Manager Name and Phone No:

Construction Bid Cost: \$ \_\_\_\_\_

Final Construction Cost: \$ \_\_\_\_\_

Total Value of Change Orders: \_\_\_\_\_

Original Construction Contract Duration: \_\_\_\_\_ (Working Days)

Original Contract Completion Date: \_\_\_\_\_

Actual Date of Completion: \_\_\_\_\_

Scope of Work Performed: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Length of the Project. \_\_\_\_\_

List the Subcontractors. \_\_\_\_\_

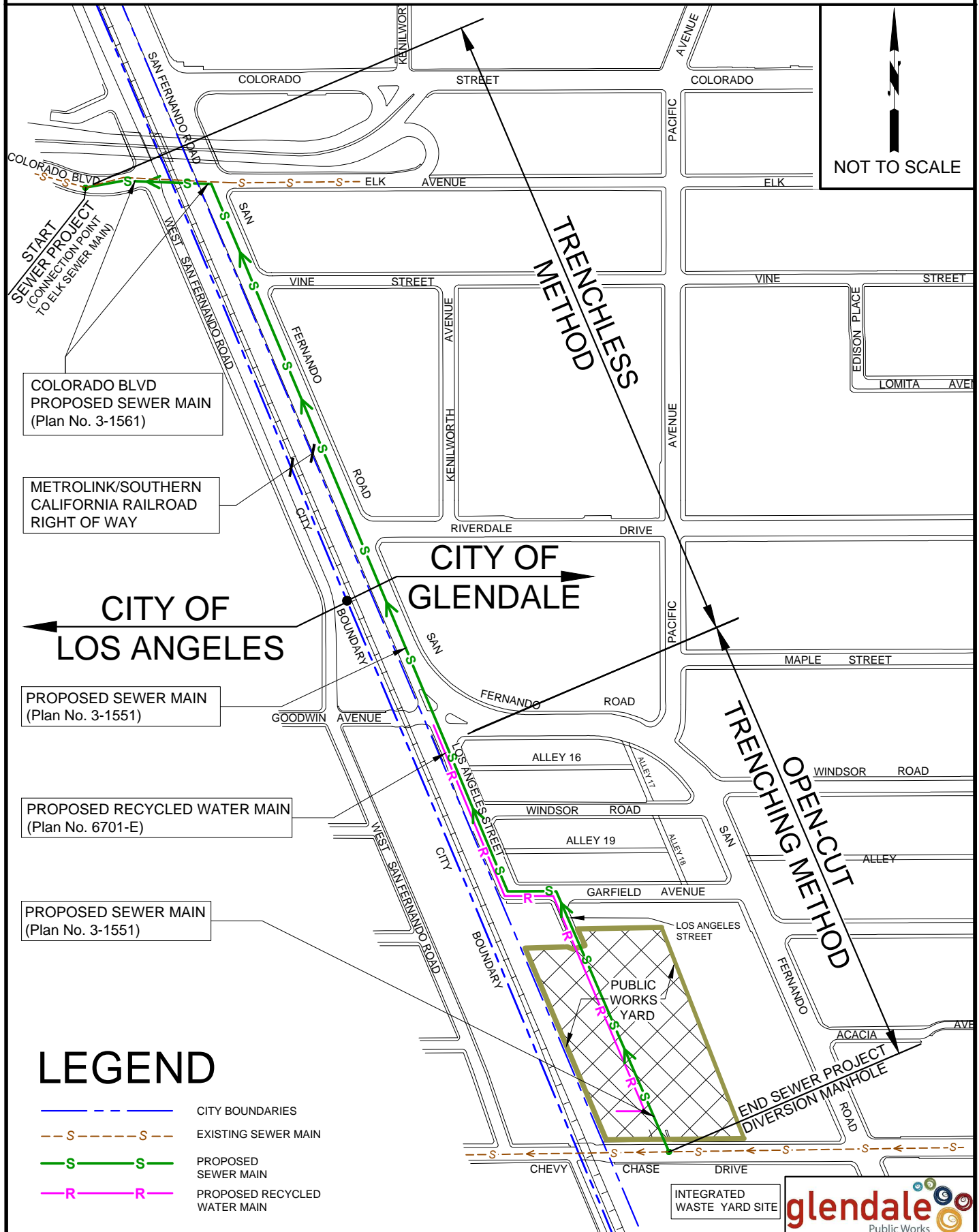
List the Equipment Manufacturers and Supplier \_\_\_\_\_

List Special Construction Method \_\_\_\_\_

# PROJECT LOCATION MAP

## CHEVY CHASE SEWER DIVERSION AND PUBLIC WORKS YARD RECYCLED WATER MAIN EXTENSION

### SPECIFICATIONS NO. 3445





**SEWER PLAN No. 3-1551 and 3-1561**

Item No.	Article	Estimated Quantity	Units	Unit Price	Total Price
1	Pipe Jacking Mobilization and Demobilization (48-Inch Boring Machine)	1	LS		
2	Pipe Jacking Mobilization and Demobilization 68-Inch Boring Machine)	1	LS		
3	Bore Shaft Shoring (± 17 feet deep, Manhole No. 2)	1	LS		
4	Double Shaft - Combination Bore/Receiving Shaft Shoring (± 34 feet deep, Manhole Nos. 3)	1	LS		
5	Bore Shaft Shoring (±38 to ±42 feet deep, Manhole Nos. 5, 6, 8)	3	LS		
6	Bore Shaft Shoring (± 17 feet deep, Sewer Metering Vault Manhole No.12)	1	LS		
7	Receiving Shaft Shoring (±36, ±40 feet deep Manhole Nos. 4, 7, 9)	3	LS		
8	9-foot Diameter T-lock Lined Sewer Manhole (±17 feet deep, Point of Connection in the City of Los Angeles, Manhole No.1 )	1	LS		
9	6-foot Diameter T-lock Lined Sewer ( ± 17 feet deep, Manhole No. 2)	1	EA		
10	6-foot Diameter T-lock Lined Sewer Manhole ( ±34 to ±42 feet deep, Manhole Nos. 3,4,5,6,7,8,9)	7	EA		
11	6-foot Diameter Sewer Manhole, ± 20 feet deep, (Manhole Nos. 15, 16, 17, 18, 19)	5	EA		
12	Sewer Metering Vault, 27 feet deep (Manhole No. 12)	1	LS		
13	4-foot Diameter Sewer Manhole, 10 feet deep (Manhole No. 13A)	1	EA		
14	6-foot Diameter Drop Sewer Manhole, ± 25 feet deep; (Manhole Nos. 13B and 14)	2	EA		
15	9-foot Diameter Sewer Manhole, ±14 feet deep, (Manhole No. 20, Point of Connection in City of Glendale)	1	LS		
16	18-Inch Parshall Flume	1	LS		
17	Ultrasonic Transducer and Modem, including 2" PVC Conduit to South Side of Los Angeles Street	1	LS		
18	54-Inch OD HDPE DR 21 Sewer Pipe, Open Trench	41	LF		
19	48-Inch OD HDPE DR 21 Sewer Pipe in Casing	309	LF		
20	36-Inch OD HDPE DR 21 Sewer Pipe in Casing	2,421	LF		
21	20-Inch HDPE Pipe Air Jumper, Open Trench, Incl. Connection to Ex SMH	49	LF		
22	36-Inch VCP Sewer Pipe in Open Trench	1,444	LF		

Contractor's Prequalification Questionnaire to Bid the Chevy Chase Sewer Diversion Project, Specifications No. 3445

23	10-Inch VCP Sewer Pipe in Open Trench	8	LF		
24	8-Inch VCP Sewer Pipe in Open Trench	10	LF		
25	48-Inch Steel Casing, 3/8" Thick Open Shield Pipe Jacked	2,134	LF		
26	68-Inch Steel Casing, 15/16" Thick Open Shield Pipe Jacked	474	LF		
27	City of LA Permit Work, Street Restoration	4,800	SF		
28	City of LA Permit Work, Street Light Conduit	1	LS		
29	MTA Rail Road (Permit Required Work)	1	LS		
30	Video Inspection of Completed Sewer Pipelines	4,215	LF		
31	Service Lateral Connections	19	EA		
32	Demolition of Existing Sewer Manholes	5	EA		
33	Abandon of Existing Sewer Manholes	2	EA		
34	Removal of Existing Sewer 10" Sewer Pipeline	50	LF		
35	Removal of Existing Sewer 12" Sewer Pipeline	120	LF		
36	Abandoning of Existing 10" Sewer Pipeline	120	LF		
37	Abandoning of Existing 12" Sewer Pipeline	480	LF		
38	Utility Pipe Supports	30	EA		
39	Temporary Pipe Supports	20	EA		
40	Dewatering and Dewatering Wells	9	EA		
41	Temporary Water By-Pass for 12-Inch water main	1	LS		
42	Temporary RC Box Support per LACDPW Permit	1	LS		

BID  
TOTAL \$ \_\_\_\_\_

## EXHIBIT 4

### INSURANCE REQUIREMENTS

#### 1.0 REQUIRED INSURANCE POLICIES

At its own expense, CONTRACTOR shall obtain, pay for, and maintain – and shall require each of its Subcontractors to obtain and maintain – for the duration of the Agreement, policies of insurance meeting the following requirements:

##### **A. Workers' Compensation / Employer's Liability Insurance.**

1. Worker's Compensation / Employer's Liability insurance shall provide workers' compensation statutory benefits as required by law, and shall be in an amount not less than:
  - (a) ONE MILLION DOLLARS (\$1,000,000) per accident for bodily injury or disease;
  - (b) ONE MILLION DOLLARS (\$1,000,000) per employee for bodily injury or disease; and
  - (c) ONE MILLION DOLLARS (\$1,000,000) policy limit.

##### **B. Commercial General Liability ("CGL") (primary).**

City and its employees and agents shall be added as additional insureds, not limiting coverage for the additional insured to "ongoing operations" or in any way excluding coverage for completed operations. Coverage shall apply on a primary, non-contributing basis in relation to any other insurance or self-insurance, primary or excess, available to City or any employee, representative or agent of City. Coverage shall not be limited to the vicarious liability or supervisory role of any additional insured. Coverage shall contain no contractors' limitation or other endorsement limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

1. CGL insurance must not be written for less than the limits of liability specified as follows:
  - (a) TWO MILLION DOLLARS (\$2,000,000) per occurrence for bodily injury (including accidental death) to any one person;
  - (b) TWO MILLION DOLLARS (\$2,000,000) per occurrence for personal and advertising injury to any one person;
  - (c) TWO MILLION DOLLARS (\$2,000,000) per occurrence for property damage; and
  - (d) TWO MILLION DOLLARS (\$2,000,000) general aggregate limit.
  - (e) TWO MILLION DOLLARS (\$2,000,000) products and completed operations.
2. CGL insurance must include all major divisions of coverage and must cover:
  - (a) Premises Operations (including Explosion, Collapse, and Underground ["X,C,U"] coverages as applicable);
  - (b) Independent Contractor's Protective;
  - (c) Independent Contractors;Exhibit

- (d) Personal and Advertising Injury (with Employer's Liability Exclusion deleted);
  - (e) Contractual Liability; and
  - (f) Broad Form Property Damage.
3. Umbrella or Excess Liability Insurance (over primary), if provided, shall be at least as broad as any underlying coverage. Coverage shall be provided on a "pay on behalf" basis, with defense costs payable in addition to policy limits. There shall be no cross liability exclusion and no contractor's limitation endorsement. The policy shall have starting and ending dates concurrent with the underlying coverages. The Named Insured may determine the layering of primary and excess liability insurance provided that if such layering differs from that described here, the actual coverage program meets the minimum total required limits and complies with all other requirements listed here.

**C. Business Automobile Liability Insurance**

1. Business Automobile Liability Insurance must cover all vehicles, whether rented, leased, hired, scheduled, owned or non-owned. If Contractor does not own any vehicles, this requirement may be satisfied by a non-owned vehicle endorsement to the general and umbrella liability policies. Business Automobile Liability Insurance coverage amounts shall not be less than the following:
- (a) ONE MILLION DOLLARS (\$1,000,000) per occurrence for bodily injury (including accidental death) to any one person; and
  - (b) ONE MILLION DOLLARS (\$1,000,000) per occurrence for property damage; or
  - (c) TWO MILLION DOLLARS (\$2,000,000) combined single limit.

**D. Contractors Pollution Liability Insurance (CPL)/ NOT REQUIRED FOR THIS PROJECT**

**E. Builder's Risk Insurance/ NOT REQUIRED FOR THIS PROJECT**

**2.0 GENERAL REQUIREMENTS—ALL POLICIES**

- A. Qualifications of Insurer. At all times during the term of this Contract, Contractor's insurance company must meet all of the following requirements:
- 1. "Admitted" insurer by the State of California Department of Insurance or be listed on the California Department of Insurance's "List of Surplus Line Insurers" ("LESLI");
  - 2. Domiciled within, and organized under the laws of, a State of the United States; and
  - 3. Carry an A.M. Best & Company minimum rating of "A:VII".
- B. Continuation Coverage. For insurance coverages that are required to remain in force after the Final Payment, and if reasonably available, Contractor shall submit to City, with the final Application for Payment, all certificates and additional insured endorsements evidencing the continuation of such coverage.
- C. Deductibles or Self-Insured Retentions. All deductibles or self-insured retentions are subject to City's review and approval, in its sole discretion.

- D. Commercial General Liability and Business Automobile insurance policies must be written on an “occurrence” basis and must add the City of Glendale and its officers, agents, employees and representatives as additional insureds.
- E. Contractor's Insurance Primary. Other insurance (whether primary, excess, contingent or self-insurance, or any other basis) available to City, or its representatives, or both, is excess over Contractor's insurance. City's insurance, or self-insurance, or both, will not contribute with Contractor's insurance policy.
- F. Waiver of Subrogation. Contractor and Contractor's insurance company waive— and shall not exercise— any right of recovery or subrogation that Contractor or the insurer may have against City, or its representatives, or both.
- G. Separation of Insureds. Contractor's insurance policy applies separately to each insured or additional insured who is seeking coverage, or against whom a claim is made or suit is brought, except that the naming of multiple insureds will not increase an insurance company's limits of liability.
- H. Claims by Other Insureds. Contractor's insurance policy applies to a claim or suit brought by an additional insured against a Named Insured or other insured, arising out of bodily injury, personal injury, advertising injury, or property damage.
- I. Premiums. City is not liable for a premium payment or another expense under Contractor's policy
- J. At any time during the duration of this Contract, City may do any one or more of the following:
  - 1. Review this Agreement's insurance coverage requirements;
  - 2. Require that Contractor obtain, pay for, and maintain more insurance depending on City's assessment of any one or more of the following factors:
    - (a) City's risk of liability or exposure arising out of, or in any way connected with, the services of Contractor under this Agreement;
    - (b) The nature or number of accidents, claims, or lawsuits arising out of, or in any way connected with, the services of Contractor under this Agreement; or
    - (c) The availability, or affordability, or both, of increased liability insurance coverage.
  - 3. Obtain, pay for, or maintain a bond (as a replacement for an insurance coverage) from a California corporate surety, guaranteeing payment to City for liability, or costs, or both, that City incurs during City's investigation, administration, or defense of a claim or a suit arising out of this Agreement; or
- K. Contractor shall maintain the insurance policy without interruption, from the Project's commencement date to the Final Payment date, or until a date that City specifies for any coverage that Contractor must maintain after the Final Payment.
- L. Contractor shall not allow any insurance to expire, cancel, terminate, lapse, or non-renew. Contractor's insurance company shall mail City written notice at least thirty (30) days in advance of the policy's cancellation, termination, non-renewal, or reduction in coverage and ten (10) days before its insurance policy's expiration, cancellation, termination, or non-renewal, Contractor shall deliver to City evidence of the required coverage as proof that Contractor's insurance policy has been renewed or replaced with another insurance policy which, during the duration of this Agreement, meets all of this Agreement's insurance requirements.

- M. At any time, upon City's request, Contractor shall furnish satisfactory proof of each type of insurance coverage required— including a certified copy of the insurance policy or policies; certificates, endorsements, renewals, or replacements; and documents comprising Contractor's self-insurance program— all in a form and content acceptable to the City Attorney or City's Risk Manager.
- N. If Contractor hires, employs, or uses one or more Subcontractor(s) to perform work, services, operations, or activities on Contractor's behalf, Contractor shall ensure that the Subcontractor complies with the following.
  - 1. Meets, and fully complies with, this Agreement's insurance requirements; and
  - 2. Furnishes City at any time upon its request, with a complete copy of the Subcontractor's insurance policy or policies for City's review, or approval, or both. Failure of City to request copies of such documents shall not impose any liability on City, or its employees.
- O. Contractor's failure to comply with an insurance provision in this Agreement constitutes a material breach upon which City may immediately terminate or suspend Contractor's performance of this Agreement, or invoke another remedy that this Agreement or the law allows. At its discretion and without waiving any other rights it may have pursuant to law, City has the right but not a duty to obtain or renew the insurance and pay all or part of the premiums. Upon demand, Contractor shall repay City for all sums or monies that City paid to obtain, renew, or reinstate the insurance, or City may offset the cost of the premium against any sums or monies that City may owe Contractor.

### **3.0 CONTRACTOR'S SUBMITTAL OF CERTIFICATES AND ENDORSEMENTS**

- A. Contractor shall have its insurance carrier(s) or self-insurance administrator(s) complete and execute the following insurance documents and shall deliver said documents at the same time Contractor delivers this Agreement to City. City will neither sign this Agreement nor issue a "Notice to Proceed" until the City Attorney or City's Risk Manager has reviewed and approved all insurance documents. City's decision as to the acceptability of all insurance documents is final. Sample insurance documents in the City's approved format are set forth in this Exhibit 4.
- B. Required Submittals for Commercial General Liability, Business Automobile Insurance and Contractor's Pollution Liability Insurance. The following submittals must be on forms satisfactory to the City Attorney or City's Risk Manager, and signed by the insurance carrier or its authorized representative – which fully meet the requirements of, and contain provisions entirely consistent with, all of the insurance requirements set forth herein.
  - 1. "Certificate of Insurance;"
  - 2. "Additional Insured Endorsement;"
  - 3. Subrogation Endorsement: "Waiver of Transfer to Rights of Recover Against Others"

Both Certificates Of Insurance and Additional Insured Endorsements must read as follows: "The City of Glendale, and its officers, agents, employees and representatives are included as additional insureds under the policy(s). This insurance is primary to all other insurance of the City. The City's insurance and self-insurance will apply in excess of, and will not contribute with this insurance. This insurance applies separately to each insured or additional insured who is seeking coverage, or against whom a claim is made or a suit is brought. The issuing company shall mail thirty (30) days advance notice to the City for any policy cancellation, termination, non-renewal, or reduction in coverage."



- C. Required Submittals for Workers' Compensation Insurance. Contractor shall provide City with a certificate of insurance and a subrogation endorsement on forms satisfactory to the City Attorney or City's Risk Manager, and signed by the insurance carrier or its authorized representative – which fully meet the requirements of, and contain provisions entirely consistent with, this Contract's workers compensation insurance requirements. If Contractor is self-insured for workers' compensation, a copy of the "Certificate of Consent to Self-insure" from the State of California; or if Contractor is lawfully exempt from workers' compensation laws, an "Affirmation of Exemption from Labor Code §3700" form.
- D. Required Evidence of Builder's Risk Coverage. Contractor shall provide City with a certificate of insurance and a declarations page on the on a form satisfactory to the City Attorney or City's Risk Manager, and signed by the insurance carrier or its authorized representative. The policy terms must fully meet the requirements of, and contain provisions entirely consistent with, all of the insurance requirements set forth herein. The City shall be named as a loss payee on the insurance policy for the full replacement value of all buildings, structures, fixtures and materials to be constructed, maintained, repaired or supplied pursuant to this Contract.
- E. Contractor agrees to monitor and review all such coverage and assumes all responsibility for ensuring that all required coverage is provided. Contractor agrees to obtain certificates evidencing such coverage.
- F. Contractor agrees to provide immediate notice to City of any claim or loss against Contractor that includes City or any other indemnitee as a defendant. City assumes no obligation or liability by such notice, but has the right (but not the duty) to monitor the handling of any such claim or claims if they are likely to involve City.
- G. No liability policy shall contain any provision or definition that would serve to eliminate so-called "third party action over" claims, including any exclusion for bodily injury to an employee of the insured or of any contractor or subcontractor.
- H. Any "self-insured retention" must be declared and approved by City. City reserves the right to require the self-insured retention to be eliminated or replaced by a deductible. Self-funding, policy fronting or other mechanisms to avoid risk transfer are not acceptable. If Contractor has such a program, Contractor must fully disclose such program to City.
- I. Please comply with the following Sample Insurance Documents.

**COMMERCIAL GENERAL LIABILITY/AUTOMOBILE LIABILITY  
SPECIAL ENDORSEMENT – L-15 Form  
FOR THE CITY OF GLENDALE, CALIFORNIA**

SPECIFICATIONS NO. \_\_\_\_\_

---

This endorsement modifies insurance provided under the following:

- ☐ COMMERCIAL GENERAL LIABILITY INSURANCE COVERAGE PART
- ☐ AUTOMOBILE LIABILITY INSURANCE COVERAGE PART

In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or in any endorsement which now or later attaches to the policy, the Company agrees as follows:

**ADDITIONAL INSURED:** The City of Glendale, its officers, agents and employees are included as additional insureds, with respect to liability and defense of claims and suits arising out of the operations and uses performed by, or on behalf of, the named insured.

**CONTRIBUTION WAIVED:** This insurance is primary. The City of Glendale insurance program shall be excess of this insurance. The Company shall not seek contribution from the City of Glendale and its insurers.

**SEPARATION OF INSURED:** This insurance applies separately to each insured against whom claim is made or suit is brought, except that the naming of multiple insureds shall not increase the Company's limits of liability. The inclusion of any person, organization, firm, or entity as an insured under the policy shall not affect any right which such person, organization, firm, or entity would have as a claimant if not so included.

**CANCELLATION NOTICE:** If the Company elects to cancel or terminate this insurance before the stated expiration date, or declines to renew a continuous policy, or reduces the stated limits other than by impairment of an aggregate limit, the Company shall give written notice to the City of Glendale at least thirty (30) calendar days in advance of such election. For non-payment of premium, the Company shall give the City of Glendale at least ten (10) calendar days advance written notice of cancellation or termination.

Except as stated above, all other endorsements, provisions, conditions, limits and exclusions of this insurance shall remain unchanged.

COMMERCIAL GENERAL LIABILITY  
POLICY NUMBER

AUTOMOBILE LIABILITY  
POLICY NUMBER

By my signature on this endorsement, I warrant that I have authority to bind the insurance company and do so bind the company to this endorsement:

AUTHORIZED REPRESENTATIVE'S SIGNATURE

DATE SIGNED

## GUIDELINES FOR SUBMITTING EVIDENCE OF INSURANCE TO THE CITY OF GLENDALE

### IMPORTANT – PLEASE PROVIDE TO YOUR INSURANCE AGENT RIGHT AWAY

1. You must submit to the City a "Certificate of Insurance" from your insurance company for the insurance coverage(s) described in your Contract, the Project Specifications, or both. In Addition, you must submit an "Additional Insured Endorsement" if the Contract and/or Specifications require you to obtain General Liability, Automobile Liability insurance, or both. PLEASE REFER TO YOUR CONTRACT AND PROJECT SPECIFICATIONS FOR A DESCRIPTION OF THE TYPE OF INSURANCE, THE COVERAGE AMOUNT, AND OTHER CONDITIONS. ALL INSURANCE FORMS ARE SUBJECT TO THE CITY'S REVIEW AND APPROVAL.
2. The "Certificate" must state the same information that is printed on the attached sample certificate. A certificate that has missing information or that does not comply with the provisions of your Contract, the Project Specifications, or the City's insurance requirements, may cause a delay in your Contract's approval.
3. Both the "Certificate" and the "Additional Insured Endorsement" must be signed by the company issuing the insurance policy, or an authorized representative who has the authority to bind the insurance company.
4. For faster processing of your Contract, please give the City's "General Liability/Automobile Liability Special Endorsement" to your insurance company, or its authorized representative, for completion of that form. No modifications to the City's form are permitted.
5. If the insurance company or the authorized representative chooses instead to use its own endorsement form, you should allow for extra processing time by the City. The City Risk Manager or City Attorney's office must review all insurance company forms for compliance with your Contract, the Project Specifications, and the City's insurance requirements.

Please return all insurance certificate and endorsement forms to the project manager for this Project.

# SAMPLE INSURANCE CERTIFICATE

<b>ACORD™ CERTIFICATE OF LIABILITY INSURANCE</b>		DATE (MM/DD/YYYY)
PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.	
INSURED	<b>INSURERS AFFORDING COVERAGE</b>	
	INSURER A:	
	INSURER B:	
	INSURER C:	
	INSURER D:	
		NAIC #

## COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR	ADD'L	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
		<b>GENERAL LIABILITY</b> <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC				EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
		<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
		<b>GARAGE LIABILITY</b> <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN EA ACC \$ AUTO ONLY: AGG \$
		<b>EXCESS/UMBRELLA LIABILITY</b> <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE  DEDUCTIBLE \$ RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ \$ \$ \$
		<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below OTHER				WC STATU- TORY LIMITS OTH- ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

## DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

By the attached Endorsement(s): the City of Glendale, its officers, agents, employees, and representatives are added as additional insureds under the policy(s); the insurance is non-contributory and primary to the City's insurance or self-insurance; the insurance afforded under the policy(s) applies separately to each insured against whom a claim is made or a suit is brought; and the issuing company shall mail 30 days advance notice to the City for any policy cancellation, termination, or reduction of coverage.

## CERTIFICATE HOLDER

City of Glendale  
 Division/Section: \_\_\_\_\_  
 Address: \_\_\_\_\_  
  
 ATTN: Project Manager: \_\_\_\_\_  
 Contract/Project: \_\_\_\_\_

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ~~MAIL~~ MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT ~~BY THE ISSUING INSURER~~  
 AUTHORIZED REPRESENTATIVE

## EXHIBIT "A"

### INSURANCE REQUIREMENTS FOR RIGHT OF ENTRY AGREEMENTS

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to Right-of-Way, which may arise from or in connection with the performance of the work by the Contractor, his agents, representatives, employees or subcontractors.

#### 1. Minimum Scope of Insurance

Coverage shall be at least as broad as:

- ☒ Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).
- ☒ Insurance Services Office form No. CA 0001 (Ed. 1/87) covering Auto. Liability, code 1(any auto).
- ☒ Worker's Compensation insurance as required by the State of CA. & Employer's Liability Insurance.
- ☐ Course of Construction insurance form providing coverage for "all risks" of loss.
- ☐ Property insurance against all risks of loss to any tenant improvements or betterment.
- ☐ Contractor's Pollution Liability

#### 2. Minimum Limits of Insurance

Contractor shall maintain limits no less than:

- ☒ General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and Property damage.
- ☒ If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- ☒ Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
- ☒ Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
- ☐ Course of Construction: Completed value of the project.
- ☐ Property Insurance: Full replacement cost with no coinsurance penalty provision.
- ☐ Contractor's Pollution Liability: \$1,000,000 per occurrence/\$2,000,000 annual aggregate

#### 3. Certificate Holder/Additional Insured

Certificate holder and/or insured will be the following:

Southern California Regional Rail Authority (SCRRA)

Additionally Insured will be the following:

Los Angeles County Metropolitan Trans. Auth. (MTA)  
Orange County Transportation Authority (OCTA)  
Riverside County Transportation Commission (RCTC)  
San Bernardino Associated Government (SANBAG)  
Ventura County Transportation Commission (VCTC)

Burlington Northern Santa Fe Corp. (BNSF)  
Union Pacific Railroad Company (UPRR)  
National Railroad Passenger Corp. (AMTRAK)

#### 4. Railroad Protective Liability Insurance

- ☒ Railroad Protective Liability Insurance

The Contractor shall provide, with respect to the operations they or any of their subcontractors perform on the Right-of-Way, Railroad Protective Liability Insurance, AAR-AASHTO (ISO/RIMA) in the name of the SCRRA with additional insured specified in Section 3 above.

The policy shall have limits of liability of not less than **\$2 million per occurrence**, combined single limit, for coverage and for losses arising out of injury to or death of all persons and for

physical loss or damage to or destruction of Property, including the loss of use thereof. A **\$6 million annual aggregate** shall apply.

If coverage is provided on the London claims-made form, the following provisions shall apply:

- A. The limits of liability shall be not less than \$3 million per occurrence, combined single limit. A \$9 million aggregate may apply.
- B. Declarations item 6, extended claims made date, shall allow an extended claims made period no shorter than the length of the original policy period plus one year.
- C. If equivalent or better, wording is not contained in the policy form, the following endorsement must be included:

It is agreed that "physical damage to Property" means direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment, railroad tracks, roadbed, catenaries, signals, bridges or buildings.

For certain low-hazard activity, Contractor may request that the SCRRA and Member Agency waive the requirement to provide the Railroad Protective Liability Insurance. If the exposure to the track is physically separated by a building, floor or a continuous fence (no thoroughfares) and the employees of the Contractor are explicitly notified that they are not permitted to have any contact with the track, the Railroad Protective Liability Insurance requirement may be waived by SCRRA's Manager Public Projects or his/her designated representative.

**5. Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by SCRRA and Member Agency. At the option of SCRRA, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects SCRRA and Member Agency, its officials and employees or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

**6. Other Insurance Provisions**

The General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions:

- A. SCRRA and Member Agency, its subsidiaries, officials and employees are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to SCRRA and Member Agency, its subsidiaries, officials and employees.
- B. For any claims related to this work, the Contractor's insurance coverage shall be primary insurance as respects SCRRA and Member Agency, its subsidiaries, officials and employees. Any insurance or self-insurance maintained by SCRRA and Member Agency, its subsidiaries, officials and employees shall be excess of the Contractor's insurance and shall not contribute with it.
- C. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to SCRRA and Member Agency, its subsidiaries, officials and employees.



- D. The Contractor insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- E. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to SCRRA and/or Member Agency.

Course of Construction policies shall contain the following provisions:

- A. SCRRA and Member Agency shall be named as loss payee.
- B. The insurer shall waive all rights subrogation against SCRRA and Member Agency.

7. **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise approved by SCRRA and Member Agency.

8. **Verification of Coverage**

Contractor shall furnish SCRRA with original endorsements evidencing coverage required by this clause. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by SCRRA. All endorsements are to be received and approved by SCRRA before work commences. As an alternative to SCRRA's forms, the Contractor's insurer may provide complete, certified copies of all required insurance policies, including endorsements evidencing the coverage required by these specifications.

9. **Subcontractors**

Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

10. **Train Services**

The train traffic information is available on SCRRA's website at [www.metrolinktrains.com](http://www.metrolinktrains.com) (About Us, Engineering and Construction). The following is the direct link to the file.  
<http://www.metrolinktrains.com/pdfs/EngineeringConstruction/TrainTrafficDensityExhibitforSCRRASystem.pdf>

11. **Submittal**

The original insurance policy (s) shall be submitted to:

Assistant Director, Standards and Design  
Southern California Regional Rail Authority (SCRRA)  
279 East Arrow Highway, Suite 101  
San Dimas, California 91773  
Attn: Mr. Christos Sourmelis - ROW Encroachments Coordinator  
E-mail: [sourmelisc@scrca.net](mailto:sourmelisc@scrca.net)  
Office Number: (909) 394-3418

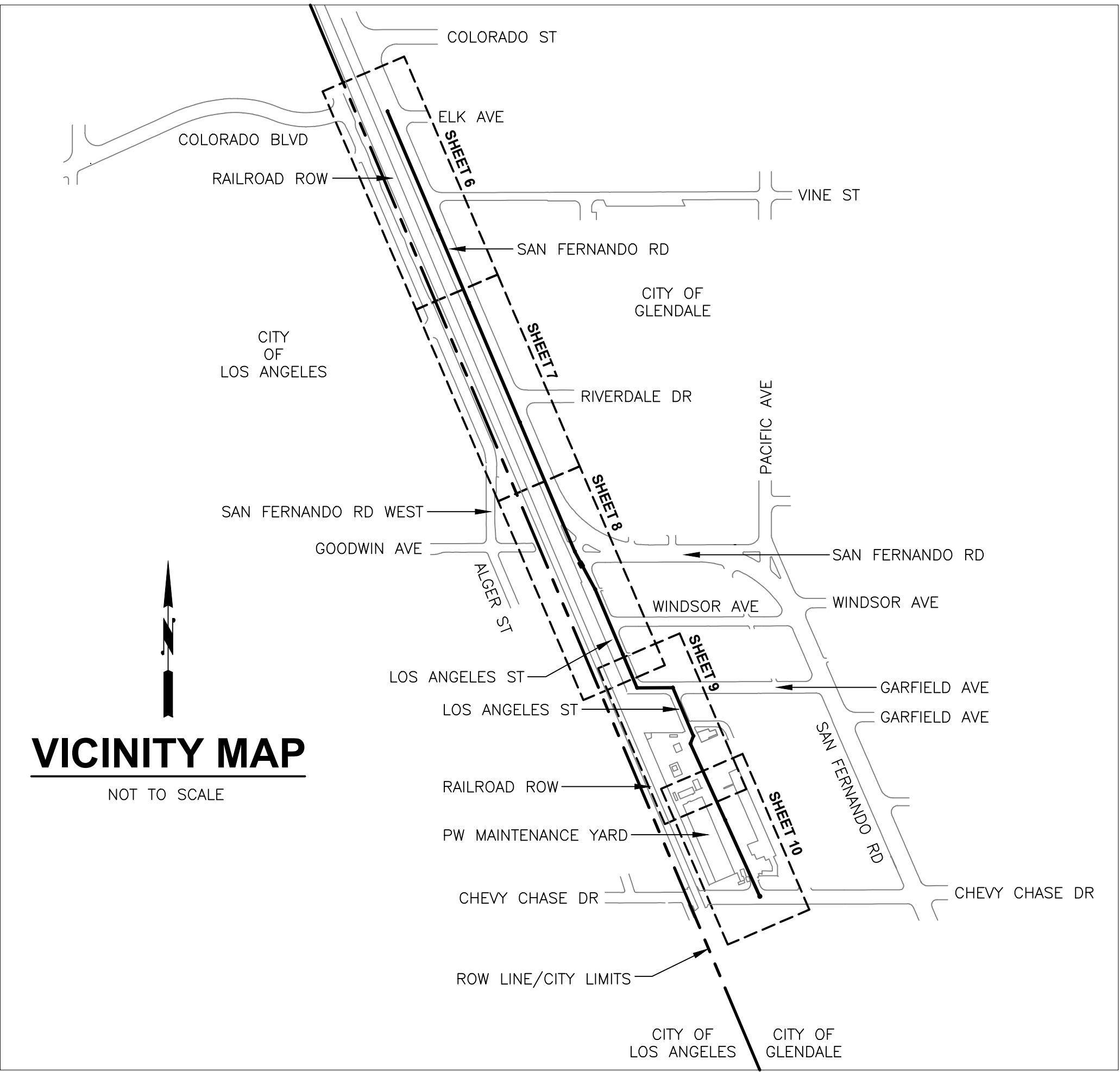
CHEVY CHASE SEWER DIVERSION PROJECT

GENERAL NOTES

1. ELEVATIONS SHOWN HEREON ARE IN FEET ABOVE THE U.S.G.S. DATUM PLANE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREENBOOK" 2012 EDITION), AND STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC, 2012 EDITION), AND SPECIFICATIONS NO. 3445.
3. STATIONING REFERS TO CENTER LINE OF SEWER TO BE CONSTRUCTED.
4. UNDERGROUND UTILITIES ARE SHOWN SCHEMATICALLY ON THE PLANS. THE CONTRACTOR SHALL OBTAIN THE EXACT LOCATION OF THESE UTILITIES FROM THE RESPECTIVE OWNERS PRIOR TO ANY EXCAVATION WORK. LOCATION OF UTILITIES WITHIN THE PROJECT ARE ON FILE IN THE CITY ENGINEER'S OFFICE FOR REFERENCE. THE CONTRACTOR SHALL ALSO NOTE THAT FIELD MARKINGS MADE BY VARIOUS UTILITIES USING UNDERGROUND SERVICE ALERT (USA) SHALL BE CONSIDERED AS IDENTIFIED UTILITIES EVEN WHEN THEY ARE NOT SHOWN ON PLANS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES DURING THE PROCESS OF THE WORK.
6. CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN ERECT POSITIONS AND SET FRAME ORIENTATION IN PROPER POSITION PRIOR TO CLOSE OF THE JOB.
7. THE FINISHED SURFACE OF ROADWAY SHALL CONFORM TO SECTIONS IN PLACE.
8. THE CONTRACTOR SHALL VERIFY EXISTING SEWER LINE ELEVATIONS AT POINTS OF CONNECTION PRIOR TO BEGINNING CONSTRUCTION AND MAKE ANY NECESSARY CORRECTIONS TO ELEVATIONS.
9. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING STORM DRAINS AND WATER MAINS AS INDICATED ON THE PLANS BEFORE PERFORMING ANY SEWER RECONSTRUCTION WORK.
10. THE CONTRACTOR SHALL POTHOLE ALL UTILITIES TO VERIFY DEPTH AND EXACT LOCATION OF UTILITY LINES. A POTHOLE REPORT SHALL BE PROVIDED PRIOR TO SUBMITTING SHORING PLANS OR ANY EXCAVATION WORK.
11. ALL EXISTING IMPROVEMENTS REMOVED OR DAMAGED SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER.
12. ALL SEWER LINES AND MANHOLES SHALL BE CONSTRUCTED IN SUCH A MANNER THAT THE FLOW IN EXISTING LINES WILL BE INTERRUPTED ONLY AFTER AN ALTERNATE MEANS OF TRANSPORTATION (SEWER BYPASS PLAN) FOR THE FLOW HAS BEEN APPROVED BY THE ENGINEER.
13. THE MANNER OF BRACING EXCAVATION IS SET FORTH IN THE RULES, ORDERS AND REGULATIONS OF THE CONSTRUCTION SAFETY ORDERS OF THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY. SHEET PILING AND OTHER TIMBERS SHALL BE REMOVED IN SUCH A MANNER AS TO PREVENT CAVING OF THE WALLS OF THE EXCAVATIONS.
14. PIPE BEDDING SHALL BE PER DETAIL 3, SHEET 5.
15. VITRIFIED CLAY PIPE SHALL BE OF THE CLASS DESIGNATED AS HIGH STRENGTH.
16. PERMANENT TRENCH RESURFACING SHALL BE PER DETAIL 3, SHEET 5.
17. CONTRACTOR SHALL REMOVE AND REPLACE ANY EXCAVATED ASPHALT CONCRETE PAVEMENT OR PORTLAND CEMENT CONCRETE PAVEMENT WITH THE SAME PAVEMENT THICKNESS, BUT NOT LESS THAN 4-INCH.
18. CONTRACTOR SHALL NOTIFY RESIDENTIAL PROPERTY OWNERS 72 HOURS AND BUSINESS ESTABLISHMENTS 96 HOURS PRIOR TO ANY CLOSURE OF THEIR EXISTING DRIVEWAYS OR ALLEYS.
19. PROJECT PERSONNEL ARE RESPONSIBLE FOR MAINTAINING A TEN FOOT (10') RADIAL CLEARANCE FROM ALL OVERHEAD ELECTRICAL LINES DURING CONSTRUCTION.  
\* THIS CLEARANCE INCLUDES OPERATION OF ANY CONSTRUCTION EQUIPMENT.  
\* TO VERIFY CLEARANCE OR IF THE TEN FOOT (10') RADIAL CLEARANCE CANNOT BE MET, CONTACT THE GWP CUSTOMER SERVICE ENGINEERING TO DETERMINE THE APPROPRIATE ACTIONS.  
\* ANY WORK REQUIRED BY GWP TO MAINTAIN PROPER CLEARANCE SHALL BE AT THE DEVELOPER'S EXPENSE.
20. A MINIMUM OF FIVE FEET OF UNDISTURBED SOIL SHALL BE MAINTAINED AROUND EACH POWER POLE. EXCAVATIONS IN THE VICINITY OF ANY POWER POLE SHALL BE ADEQUATELY AND PROPERLY SHORED TO PREVENT THE POWER POLE FROM BEING UNDERMINED. ADDITIONAL SUPPORT OF THE POWER POLE MAY BE REQUIRED IF THIS SEPARATION REQUIREMENT CAN NOT BE MET.
21. PRIOR TO ANY WORK BEING DONE IN THE VICINITY OF AN EXISTING UNDERGROUND STREET LIGHT CIRCUIT, THE CONTRACTOR SHALL OBTAIN A DAILY CIRCUIT CLEARANCE FROM THE GLENDALE WATER & POWER. SEND A FAX TO GWP CORPORATE YARD, FAX NO. (818) 543-1428. SEND THE NOTIFICATION TO THE ATTENTION OF THE STREET LIGHT SUPERVISOR. A MINIMUM OF 24 HOURS IN ADVANCE OF THE TIME THE CLEARANCE IS NEEDED. NOTIFICATION TIMES ARE BASED ON WORKING DAY.
22. SAND SLURRY (1 SACK CEMENT PER CY) SHALL BE USED FOR BACKFILL FOR ALL STREETS/PW YARD WITH THIS PROJECT.
23. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY FUGRO WEST, DATED JUNE 4, 2013 AND ALL SUPPLEMENTS THERETO. THE ABOVE REFERENCED SOILS REPORT AND RECOMMENDATIONS CONTAINED THEREIN ARE TO BE FOLLOWED AND SHOULD BE CONSIDERED MINIMUM REQUIREMENTS, UNLESS MORE STRINGENT REQUIREMENTS ARE PRESENTED IN SPECIFICATIONS OR CONTAINED HEREIN.
24. THE CONTRACTOR SHALL OBTAIN A TUNNELING PERMIT FROM THE CAL OSHA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH, MINING AND TUNNEL UNIT, REFER TO UNDERGROUND CLASSIFICATION NUMBERS: C020-037-15T TO C028-037-15T.

WATER POLLUTION CONTROL GENERAL NOTES

1. THIS PROJECT WILL REQUIRE THE IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMPs) NECESSARY TO MEET MINIMUM WATER QUALITY PROTECTION REQUIREMENTS AS SPECIFIED IN SECTION 2.16 IN THE SPECIAL PROVISIONS OF THE PROJECT SPECIFICATIONS. ADDITIONAL REQUIREMENTS ARE SPECIFIED IN PART 4, SECTION E-DEVELOPMENT CONSTRUCTION PROGRAM OF THE "MUNICIPAL STORM WATER AND URBAN RUNOFF DISCHARGES PERMIT" (ORDER #01-182).
2. THE CONTRACTOR (INCLUDING ALL SUBCONTRACTORS) IS DIRECTED TO IMPLEMENT BMPs IN CONJUNCTION WITH ALL ACTIVITIES AND OPERATIONS. THE CONTRACTOR SHALL MAINTAIN COPIES OF BMP FACT SHEETS (GUIDANCE PAPER) AT THE PROJECT SITE, AND SHALL EMPHASIZE TO WORKERS/EMPLOYEES THE PRACTICES CONTAINED ON EACH FACT SHEET DURING CONSTRUCTION MEETINGS AND CONSTRUCTION OPERATIONS.
- THE FOLLOWING BMPs WERE SELECTED FROM THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK, CONSTRUCTION VOLUME ([www.cabmphandbooks.com](http://www.cabmphandbooks.com)) AND SHALL APPLY TO THIS PROJECT:
- |   |  |
|---|--|
| SITE PLANNING CONSIDERATION<br>PRESERVATION OF EXISTING VEGETATION (EC-2)   | VEHICLE & EQUIPMENT MANAGEMENT<br>VEHICLE & EQUIPMENT CLEANING (NS-08)<br>VEHICLE & EQUIPMENT MAINTENANCE (NS-10)                      |
| CONSTRUCTION PRACTICES<br>STABILIZED CONSTRUCTION ENTRANCE (TC-1)<br>SPILL PREVENTION AND CONTROL (WM-04)<br>DUST CONTROL/WIND EROSION CONTROL (WE-1)<br>STORM DRAIN INLET PROTECTION (SE-10) | MATERIAL MANAGEMENT<br>SOLID WASTE MANAGEMENT (WM-05)<br>CONCRETE WASTE MANAGEMENT (WM-08)<br>SANITARY/SEPTIC WASTE MANAGEMENT (WM-09) |



GLENDALE STANDARD PLANS

PIPE BEDDING IN TRENCHES	25-115
TRENCH RESURFACING	25-153
SUPPORT FOR WATER MAINS SPANNING	1668-A
STORM DRAIN OR SEWER TRENCHES	

LOS ANGELES COUNTY SANITARY DISTRICT

STANDARD MANHOLE, TYPE "B"	S-a-206
STANDARD MANHOLE STEP	S-a-209
STANDARD PULL RING	S-a-220
STANDARD TEMPORARY PIPE SUPPORT	S-a-222

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC)

PRECAST CONCRETE SEWER MANHOLE (4-FOOT DIAMETER)	200-3
TERMINAL CLEANOUT STRUCTURE	204-2
SEWER MANHOLE ADJUSTMENT	205-2
BREAKING INTO EXISTING MANHOLES	208-2
24" MANHOLE FRAME AND COVER	210-3
HOUSE CONNECTION SEWER	222-2
HOUSE CONNECTION REMODELING	223-2
SUPPORTS FOR CONDUIT ACROSS TRENCHES	224-2
BLANKET PROTECTION FOR PIPES	225-2
POLYPROPYLENE-PLASTIC STEP	636-2

LEGEND

	- NEW SEWER AND CASING		- UNDERGROUND GAS
	- TEMPORARY SHORING		- UNDERGROUND SEWER
	- CURB LINE		- UNDERGROUND STORM DRAIN
	- GUTTER LINE		- UNDERGROUND WATER
	- FLOWLINE		- UNDERGROUND STREET LIGHT CONDUIT
	- FENCE		
	- FENCE		
	- ROW LINE/CITY LIMIT		
	- PROPERTY LINE		
	- UNDERGROUND ELECTRIC		
	- UNDERGROUND TELEPHONE		

SHEET INDEX  
CHEVY CHASE SEWER DIVERSION PROJECT

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	CONSTRUCTION DETAILS PARSHALL FLUME
SHEET NO. 3	CONSTRUCTION DETAILS
SHEET NO. 4	CONSTRUCTION DETAILS
SHEET NO. 5	CONSTRUCTION DETAILS
SHEET NO. 6	PLAN AND PROFILE STA 9+54 TO STA 17+00
SHEET NO. 7	PLAN AND PROFILE STA 17+00 TO STA 25+00
SHEET NO. 8	PLAN AND PROFILE STA 25+00 TO STA 33+00
SHEET NO. 9	PLAN AND PROFILE STA 33+00 TO STA 39+00
SHEET NO. 10	PLAN AND PROFILE STA 39+00 TO STA 43+77

REFERENCES TO:

PLAN NO. 1-2964	LOS ANGELES ST, GARFIELD AVE, WINDSOR RD STREET IMPROVEMENT
PLAN NO. 1-2978	SAN FERNANDO RD STREET IMPROVEMENT
PLAN NO. 3-1561	COLORADO BLVD WASTE WATER PROJECT IN THE CITY OF LOS ANGELES
PLAN NO. 4-623	LOS ANGELES ST STORM DRAIN IMPROVEMENT
PLAN NO. 6701-E	PUBLIC WORKS YARD RECYCLED WATER MAIN EXTENSION
PLAN NO. 49-206	STRIPING AND SIGNING

STANDARD LEGEND & ABBREVIATIONS

	SL=STREET LIGHT	ABAN = ABANDONED
	ST. SIGN=STREET SIGN	AC = ASPHALTIC CONCRETE
	EXISTING TREE	BCR = BEGINNING CURB RETURN
	FH= FIRE HYDRANT	BC = BEGINNING OF CURVE
	TS=TRAFFIC SIGNAL	BLVD = BOULEVARD
	PPGW=POWER POLE GUY WIRE	BM = BENCH MARKS
	PP/R=POWER POLE W/ RISER	BW = BACK OF WALK
	PP=POWER POLE	CAB = CRUSHED AGGREGATE BASE
	PPSL=POWER POLE W/ STREET LIGHT	CMB = CRUSHED MISC BASE
	PTTF=POWER TRANS. TOWER FOOTING	CB = CATCH BASIN
	TSPB=TRAFFIC SIGNAL PULL BOX	CLA = CITY OF LOS ANGELES
	TSCB=TRAFFIC SIGNAL CONTROL BOX	CLS = CITY OF LOS ANGELES
	SLPB=STREET LIGHT PULL BOX	CF = CURB FACE
	SSMH=SANITARY SEWER MANHOLE	CFS = CUBIC FEET PER SECOND
	SDMH=STORM DRAIN MANHOLE	CLF = CHAIN LINK FENCE
	WMH=WATER MANHOLE	CLSM = CONTROLLED LOW STRENGTH MATERIAL
	WV=WATER VALVE	CMP = CORRUGATED METAL PIPE
	WM=WATER METER	COG = CITY OF GLENDALE
	4" CURB DRAIN	DBL = DOUBLE
	EVL=ELECTRICAL VAULT	DIA = DIAMETER
	UPB=UTILITY PULL BOX	DWY = DRIVEWAY
	TEL C BOX=TELEPHONE CONTROL BOX	EC = END OF CURVE
	TMH=TELEPHONE MANHOLE	ECR = END CURB RETURN
	TMH TO BE ADJUSTED BY OWNER	EF = EACH FACE
	GV=GAS VALVE	EG = EDGE OF GUTTER
	GV TO BE ADJUSTED BY SOUTHERN CALIFORNIA GAS CO	EL = ELEVATION
	PPS=OIL VALVE	ELEC = ELECTRIC
	PPS TO BE ADJUSTED BY PACIFIC PIPELINE SYSTEMS	EP = EDGE OF PAVEMENT
	SOILS BORING LOCATION	EW = EACH WAY
	DIRECTION OF SEWER FLOW	EXIST = EXISTING
		FF = FINISH FLOOR
		FO = FIBER OPTIC
		FS = FINISH SURFACE
		FL = FLOW LINE
		GWP = GLENDALE WATER & POWER
		HDPE = HIGH DENSITY POLYETHYLENE
		HP = HIGH POINT
		INV = PIPE INVERT
		LACSD = LOS ANGELES COUNTY SANITARY DISTRICT
		LT = LEFT
		LF = LINEAR FEET
		MH = MANHOLE
		MHCF = MANHOLE COVER AND FRAME
		MWD = METROPOLITAN WATER DISTRICT
		OD = OUTSIDE DIAMETER
		PCC = PORTLAND CEMENT CONCRETE
		PROP = PROPOSED
		PVMT = PAVEMENT
		RC = REINFORCED CONCRETE
		RCP = REINFORCED CONCRETE PIPE
		RW = RECLAIMED WATER
		RT = RIGHT
		ROW = RIGHT OF WAY
		SCG = SOUTHERN CALIFORNIA GAS
		SD = STORM DRAIN
		SF = SQUARE FEET
		SS = SANITARY SEWER
		SSCO = SEWER CLEANOUT
		SPPWC = STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
		STA = STATION
		STD = STANDARD
		STL = STEEL
		TC = TOP OF CURB
		Typ = TYPICAL
		VCP = VITRIFIED CLAY PIPE
		WCR = WHEELCHAIR CURB RAMP
		Wr = RESIDENTIAL DRIVEWAY WIDTH
		Wc = COMMERCIAL DRIVEWAY WIDTH

W'ly = WESTERLY  
E'ly = EASTERLY  
N'ly = NORTHERLY  
S'ly = SOUTHERLY

W/O = WEST OF  
E/O = EAST OF  
N/O = NORTH OF  
S/O = SOUTH OF

W = WEST  
E = EAST  
N = NORTH  
S = SOUTH

C = CENTER LINE  
C/L = CENTER LINE  
P = PROPERTY LINE

X  
X  
DETAIL NUMBER  
SHEET NUMBER

ADOPTED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF GLENDALE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2014

CITY CLERK CITY OF GLENDALE

PLANS PREPARED BY:

Kennedy/Jenks Consultants

300 N. Lake Ave, Suite 1020  
Pasadena, Ca 91101  
626-568-4300

KJJ JOB No. 1283034.00

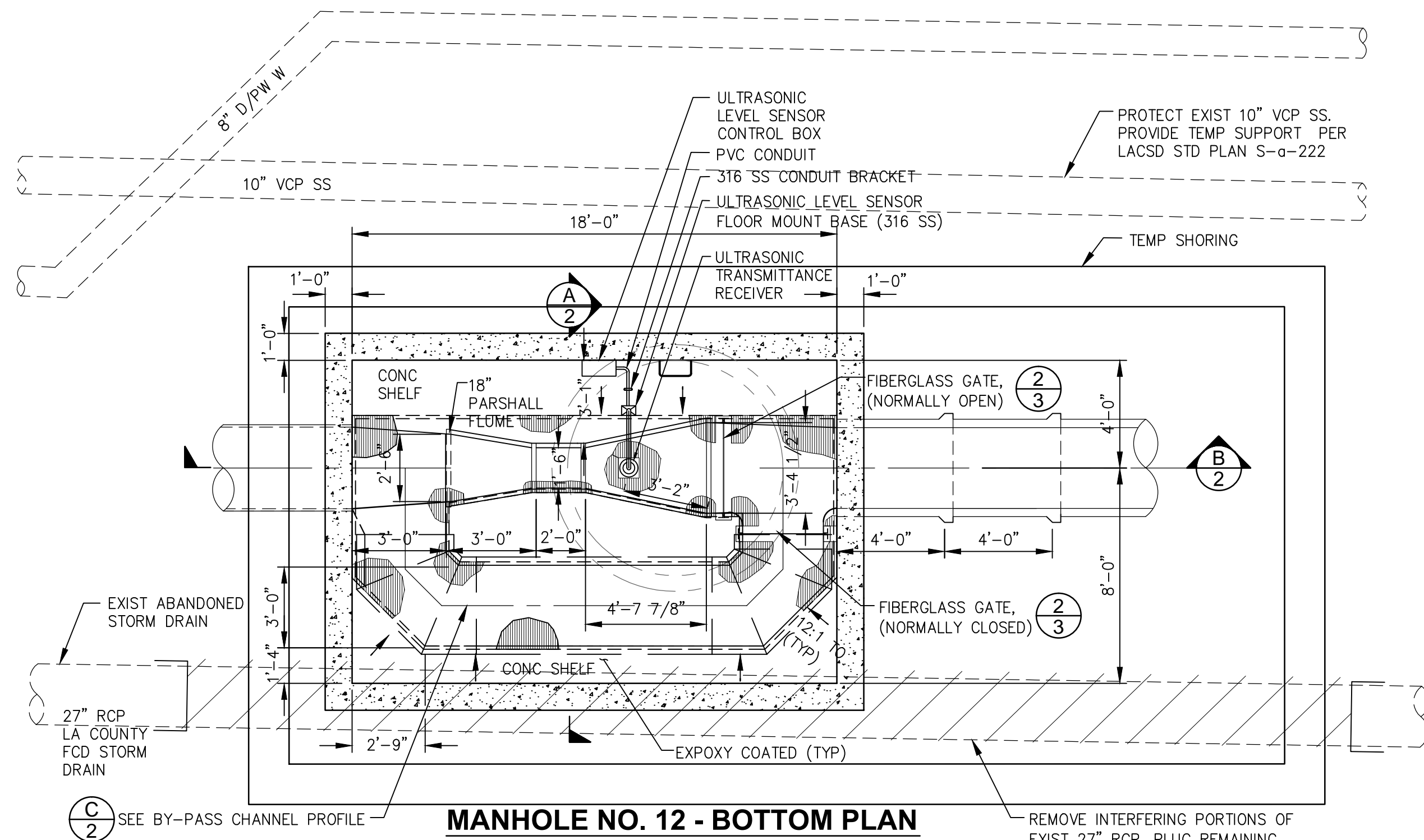


PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

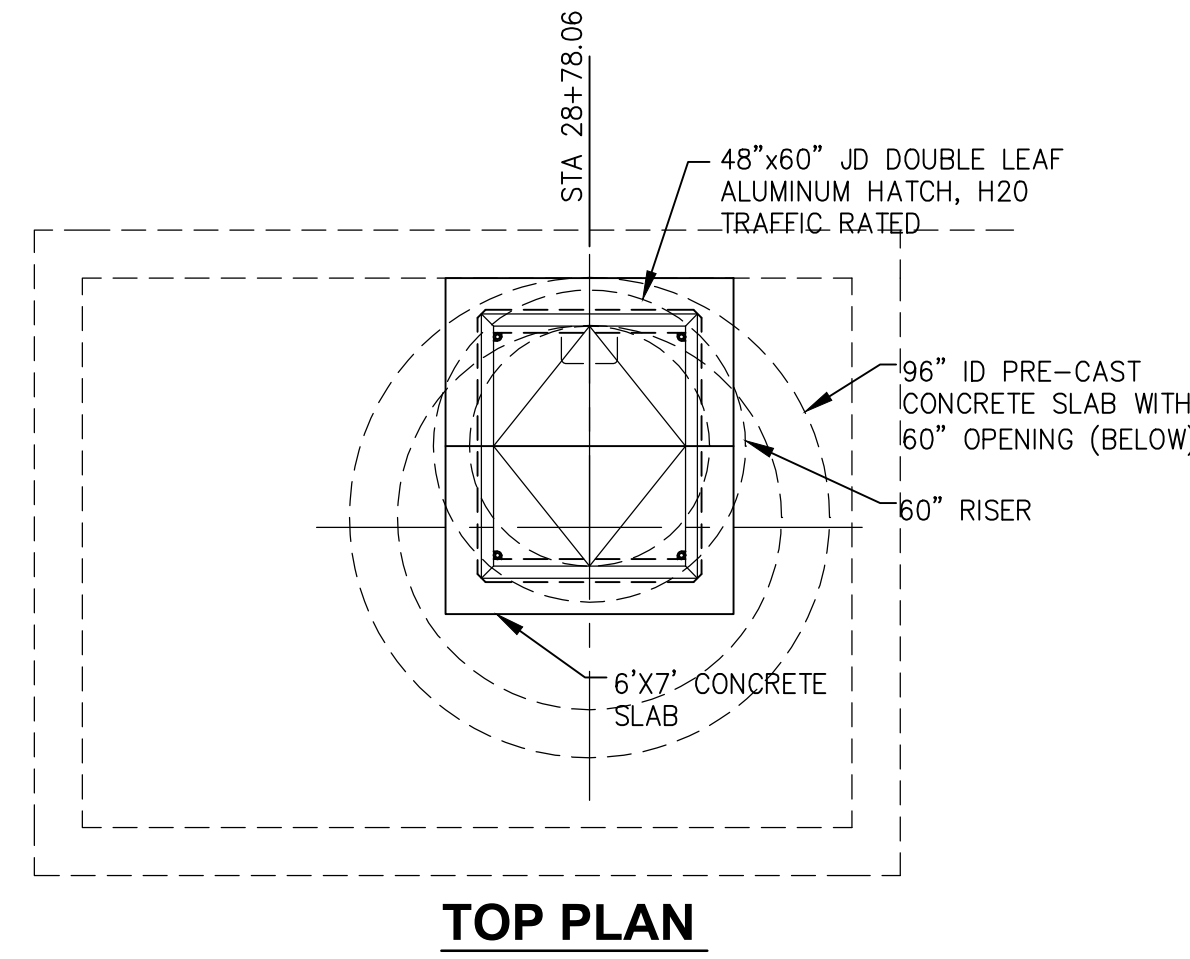
CITY OF GLENDALE  
CALIFORNIA

CHEVY CHASE SEWER DIVERSION PROJECT  
FROM CHEVY CHASE DR. TO COLORADO BLVD.

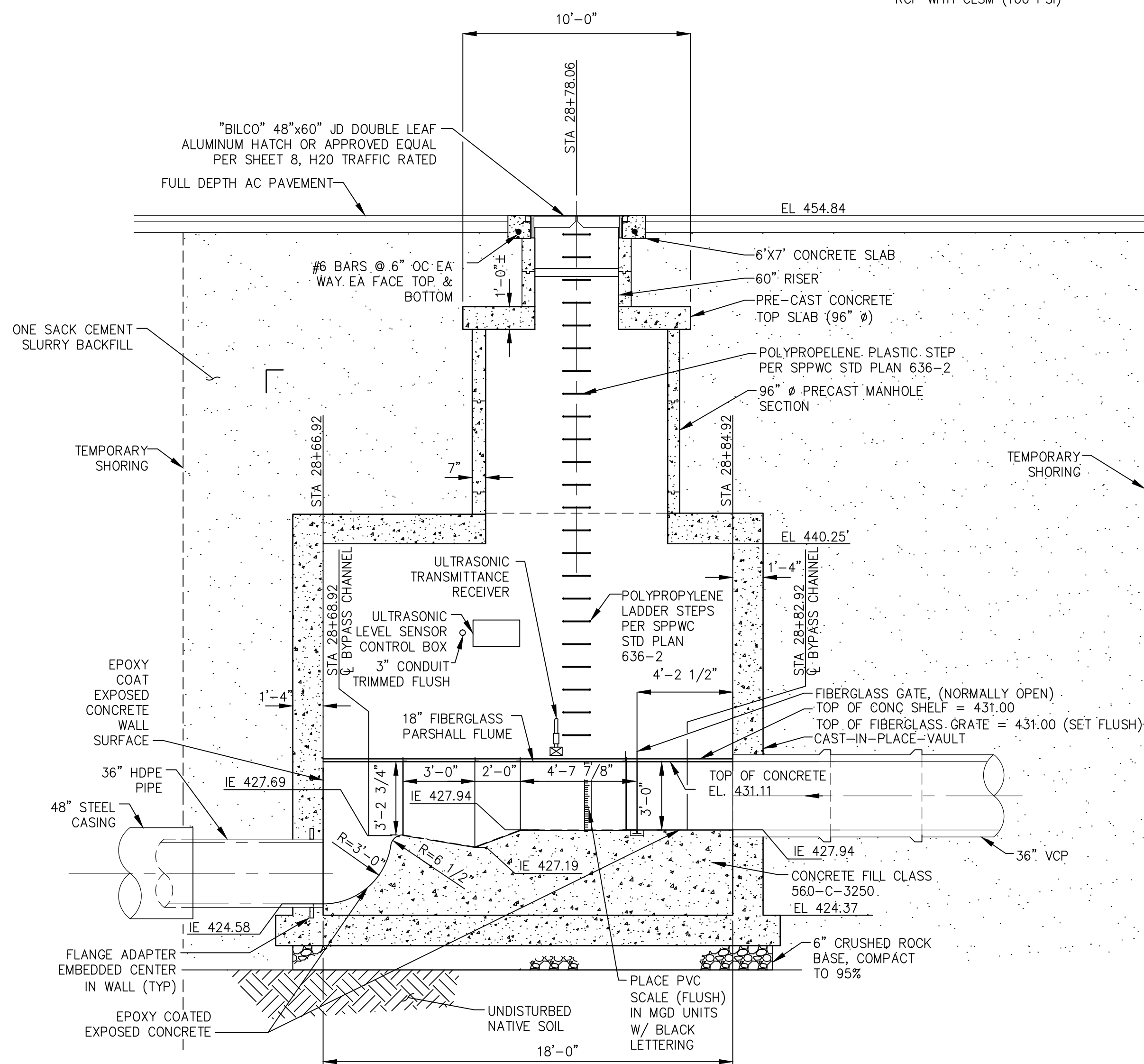
SUBMITTED _____ CIVIL ENGINEER II	APPROVED _____ PRINCIPAL CIVIL ENGINEER
APPROVED _____	APPROVED _____ TRAFFIC & TRANSPORTATION DIVISION
APPROVED _____ GLENDALE WATER & POWER DEPARTMENT GENERAL MANAGER	APPROVED _____ PUBLIC WORKS DEPARTMENT DIRECTOR OF PUBLIC WORKS/CITY ENGINEER
DESIGNED BY: C/JG	SCALE: AS SHOWN PROJ. NO. SPECIFICATIONS NO. 3445 FILE NAME:
DRAWN BY: RJS DATE: SEPTEMBER 2014 CHECKED BY: GBB	PLAN NO. 3-1551 SHEET 1 OF 10 SHEETS



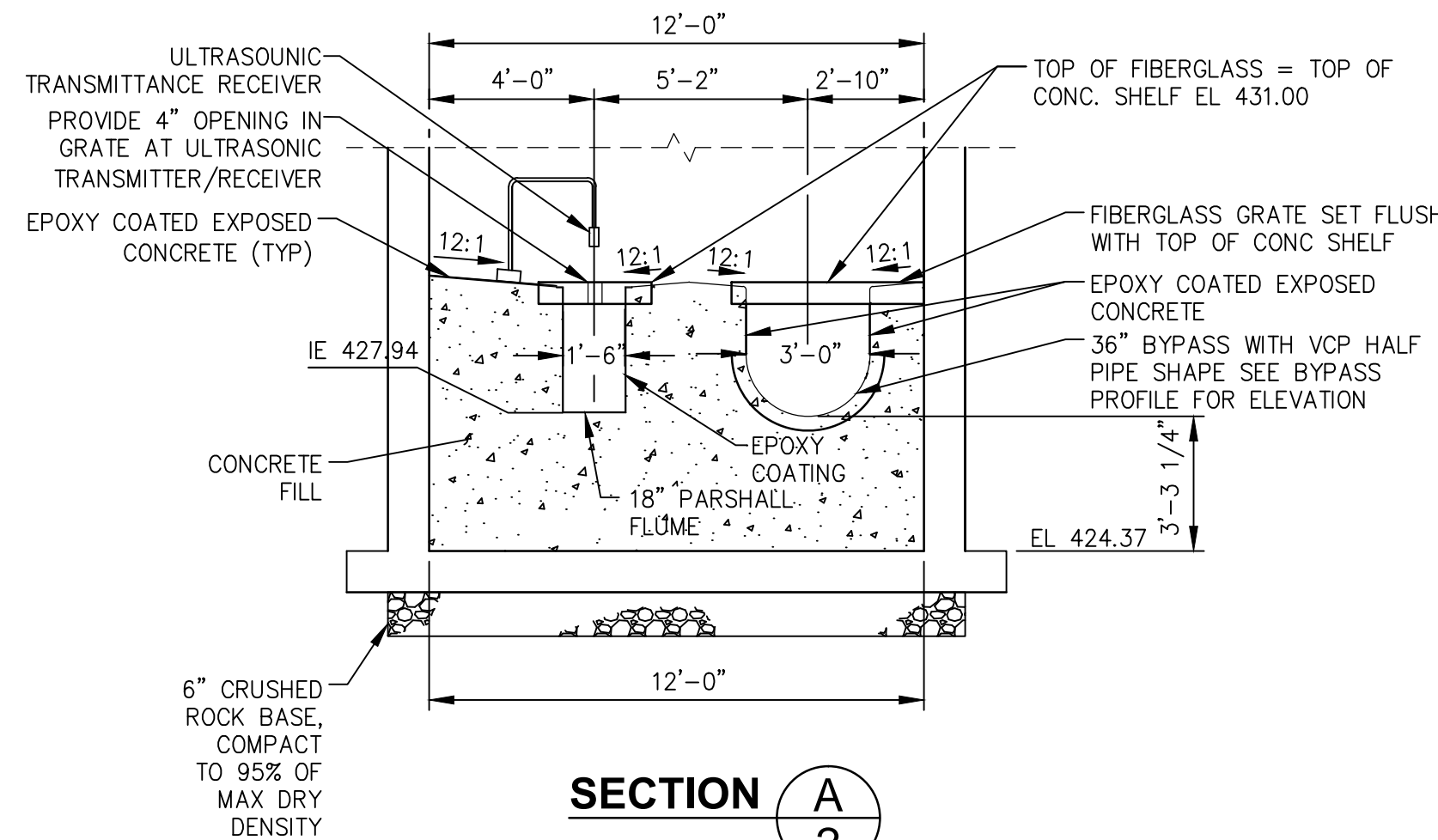
**MANHOLE NO. 12 - BOTTOM PLAN**



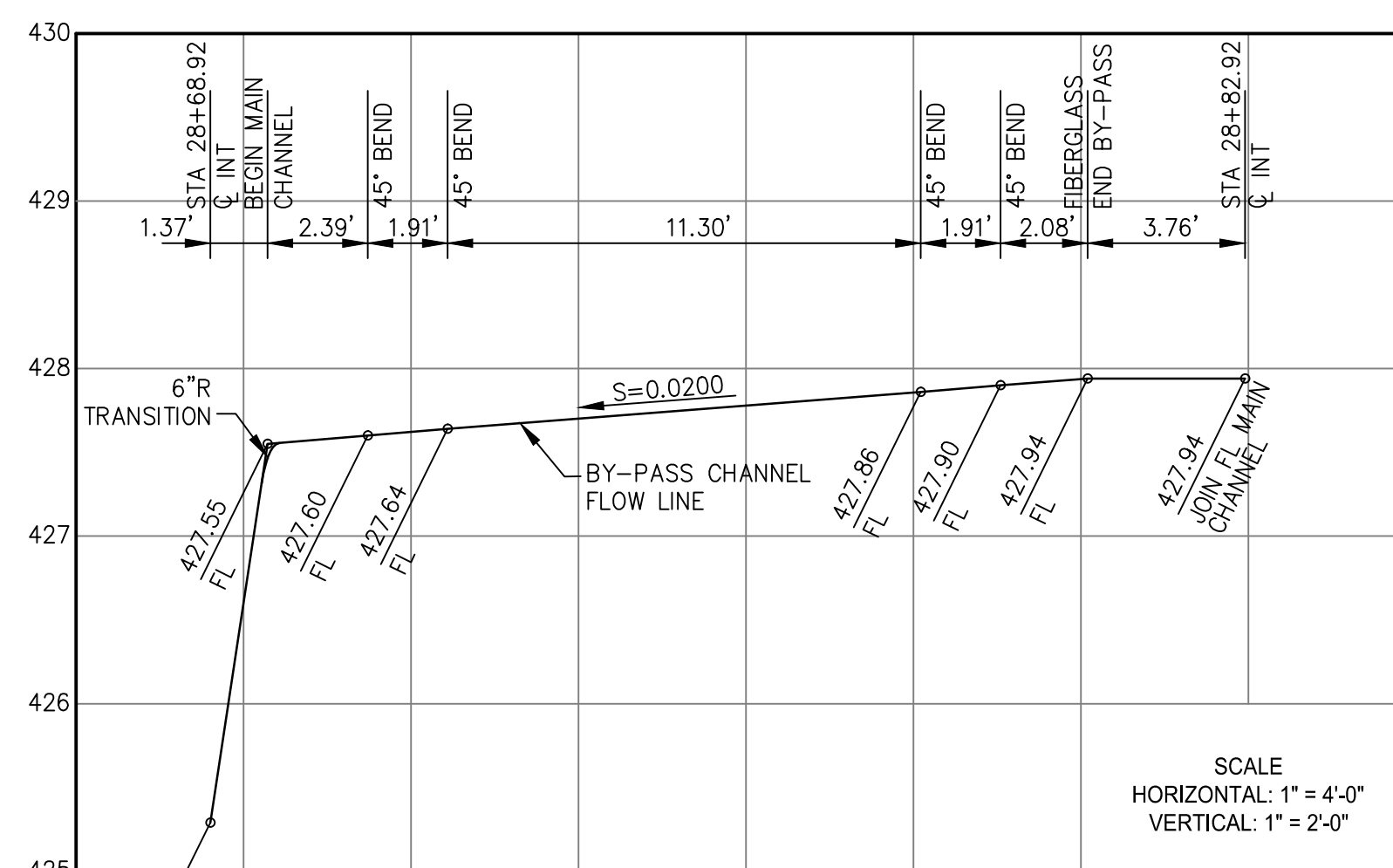
**TOP PLAN**



**MANHOLE NO. 12 - SECTION B**

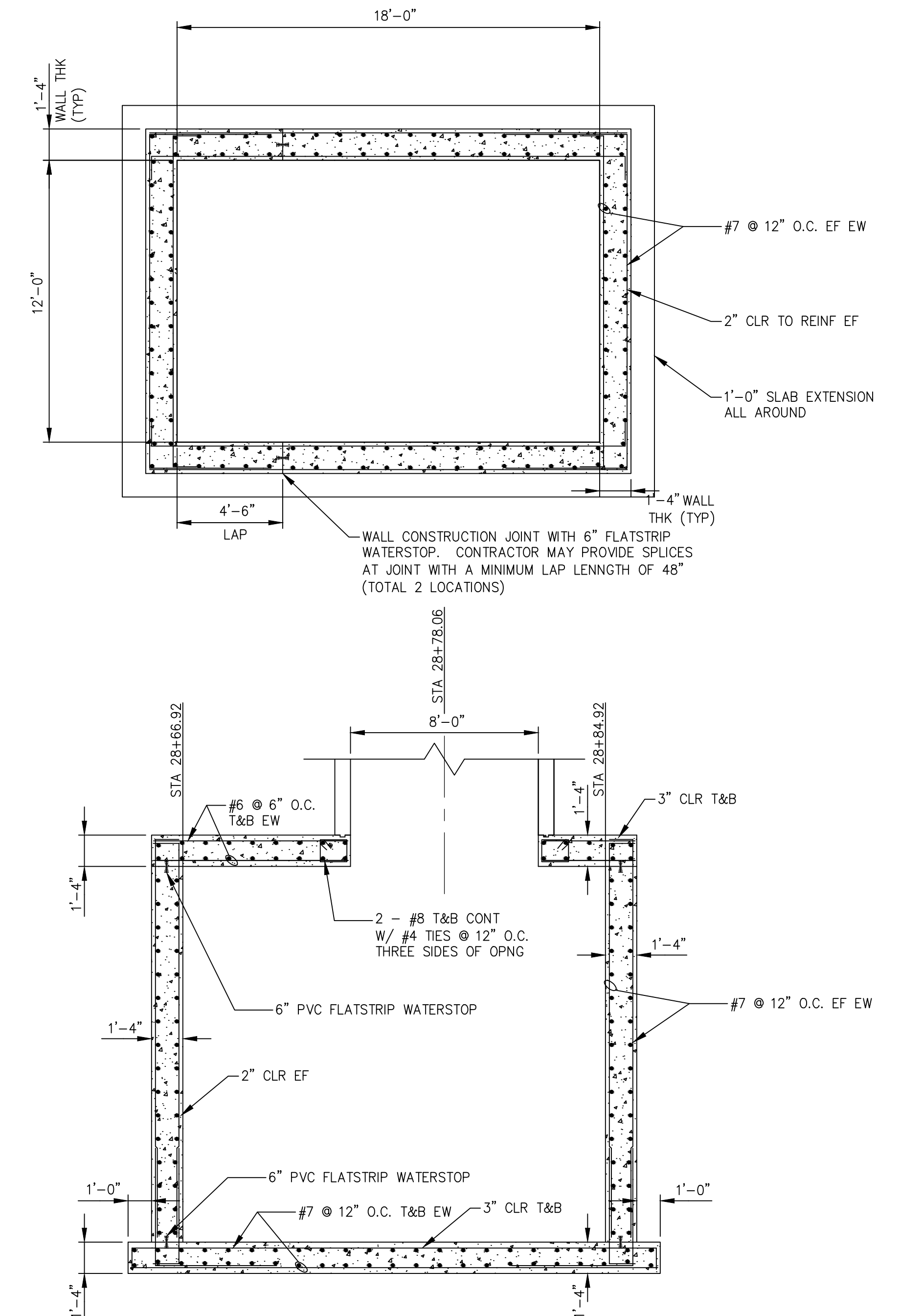
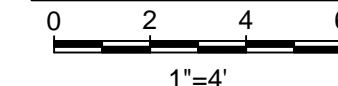


**SECTION A**



**BY-PASS CHANNEL PROFILE C**

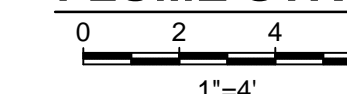
**MANHOLE NO. 12 METERING VAULT WITH PARSHALL FLUME**



**NOTES:**

- 1) CONCRETE SHALL HAVE A DESIGN COMPRESSIVE STRENGTH OF 4,500 PSI CLASS 650 -CW-4500.
- 2) FLUME, PIPE PENETRATIONS, AND LADDER RUNGS ARE NOT SHOWN FOR CLARITY. REFER TO SECTION B ON THIS DRAWING.
- 3) FOR SUBGRADE AND BACKFILL REQUIREMENTS, SECTION B ON THIS DRAWING.
- 4) WALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWING UNLESS OTHERWISE APPROVED BY THE CITY.
- 5) WATERSTOPS SHALL BE INSTALLED AT THE CENTER OF THE WALL. ALL WATERSTOPS SHALL BE 6" FLATSTRIP WATERSTOP.
- 6) PRECAST RISERS DESIGN: CONTRACTOR SHALL SUBMIT CALCULATIONS (SIGNED AND STAMPED BY A REGISTERED STRUCTURAL OR CIVIL ENGINEER IN THE STATE OF CALIFORNIA) FOR THE PRECAST SECTIONS, DESIGNED FOR THE FOLLOWING LOADS:
  - a) HS20-44 LOADING
  - b) AT-REST LATERAL EARTH PRESSURE OF 90 PCF
  - c) SOIL SEISMIC LATERAL PRESSURE OF 15H, WHERE H IS THE HEIGHT OF THE STRUCTURE

**FLUME STRUCTURAL PLAN AND SECTION 2**

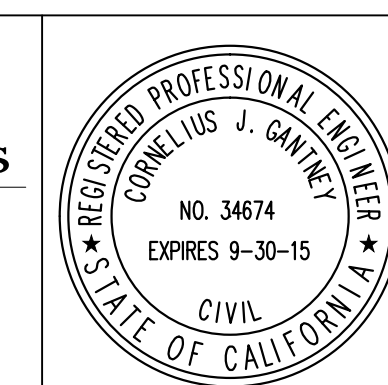


PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJ JOB No. 1283034.00



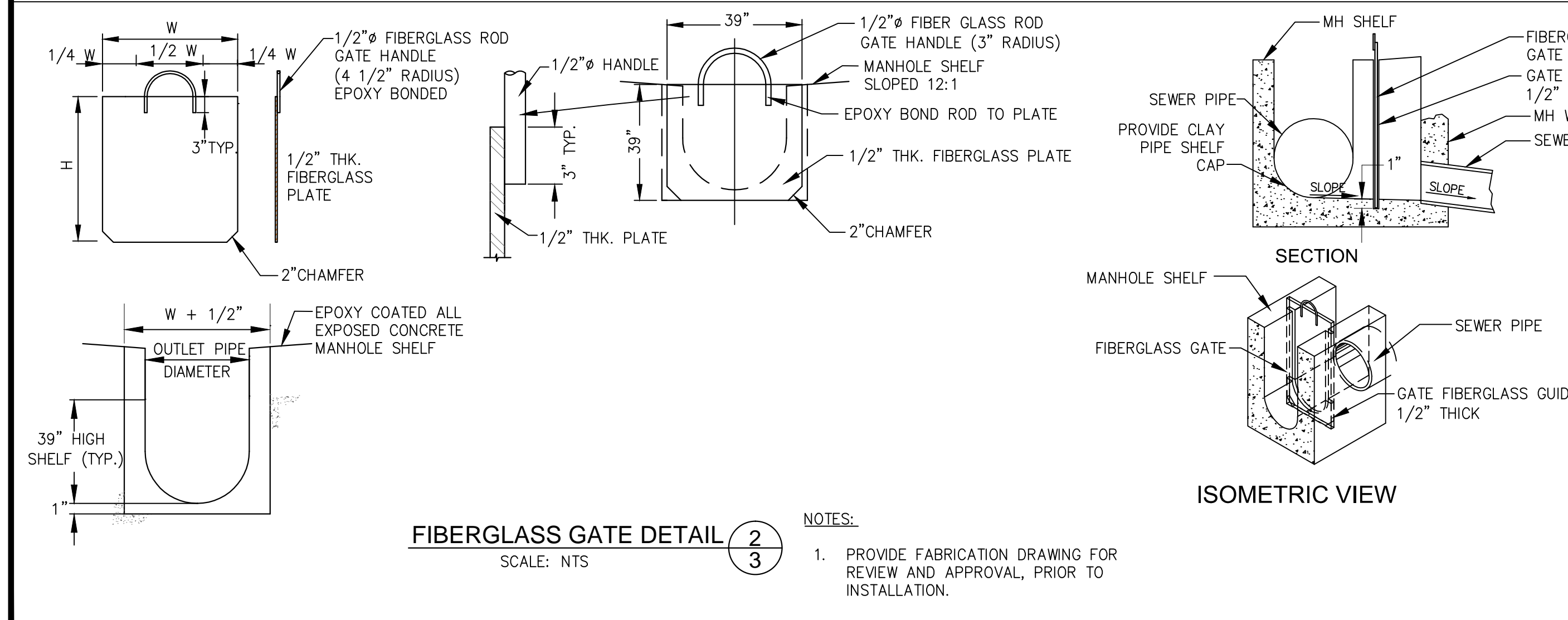
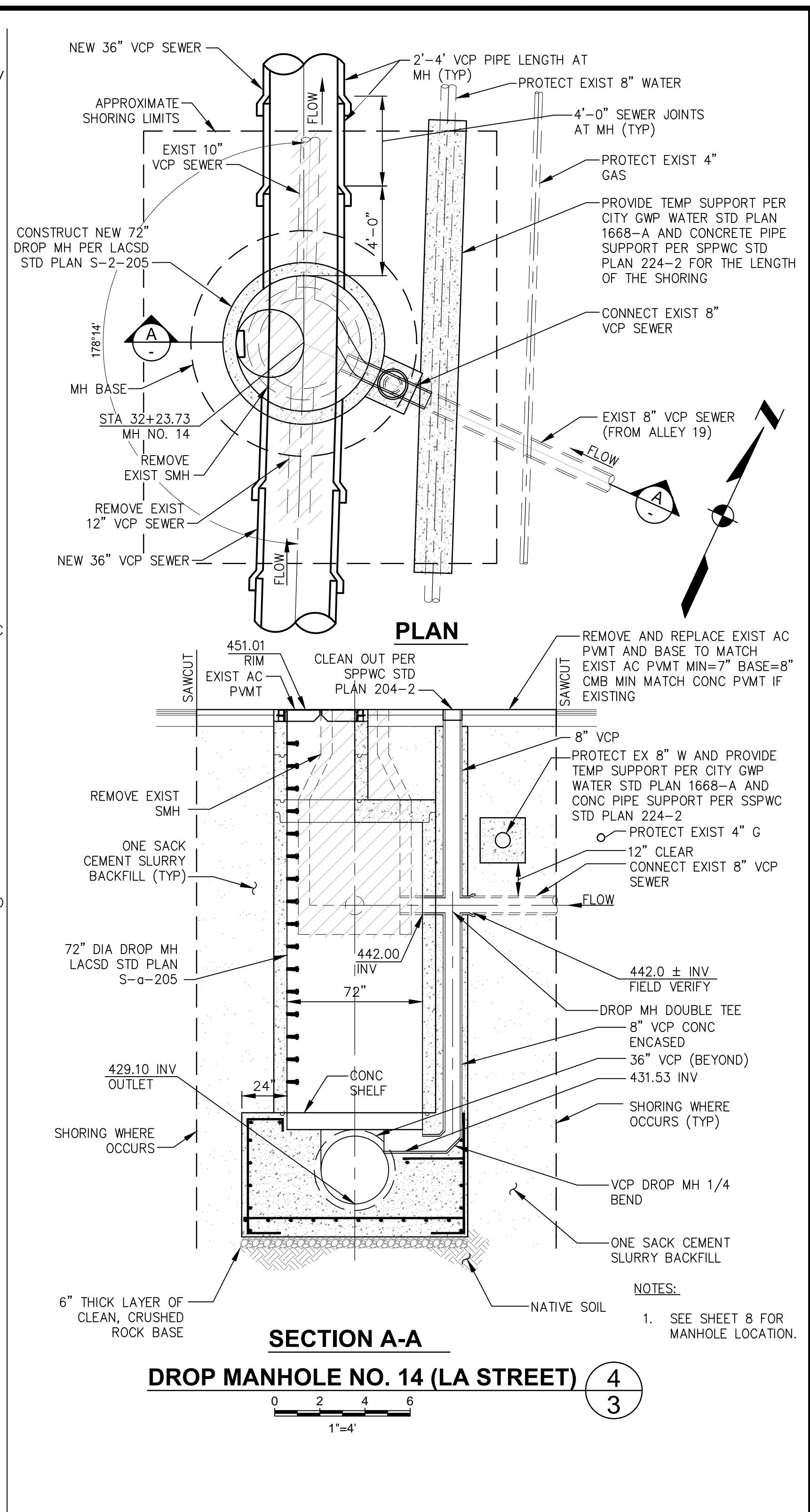
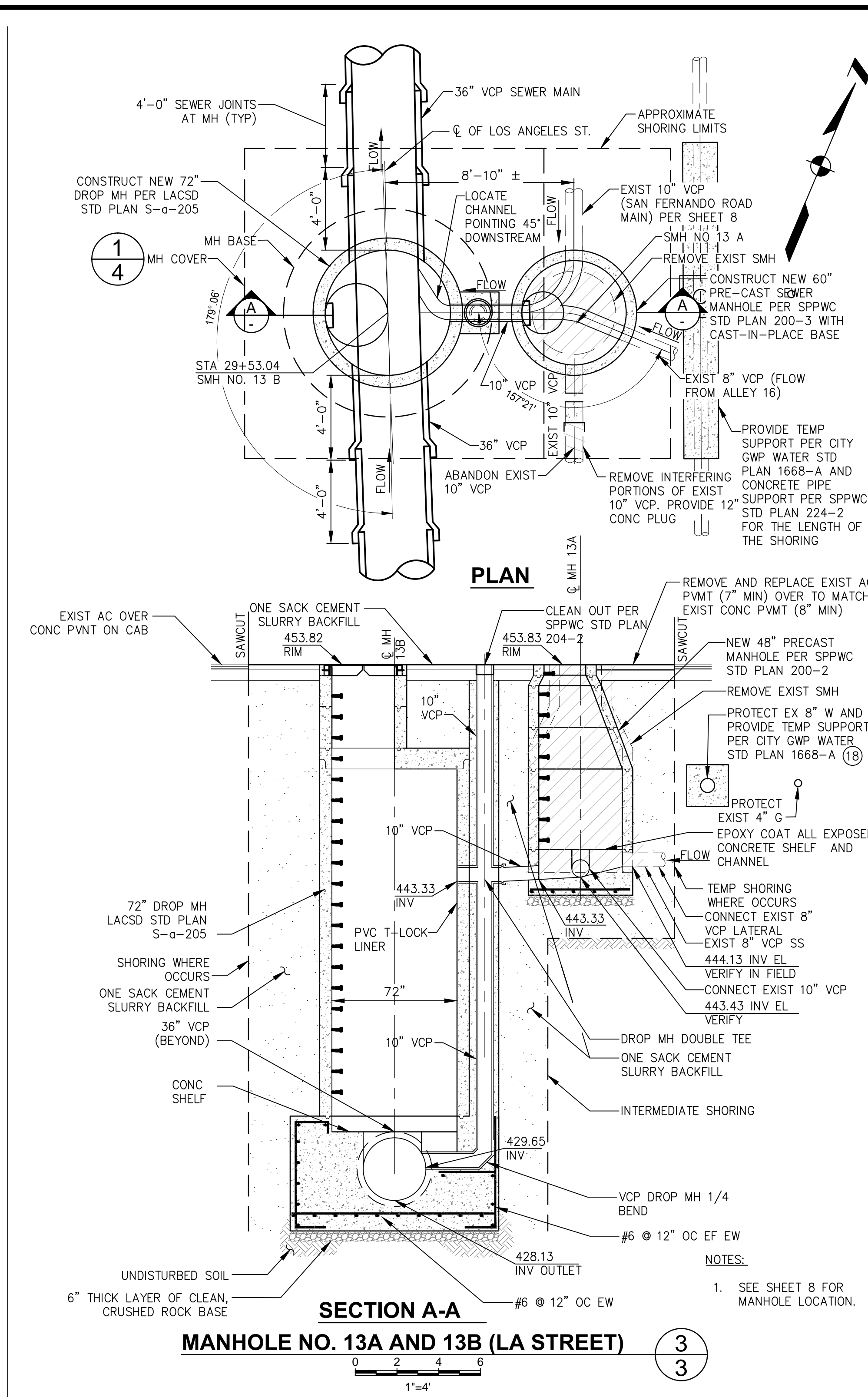
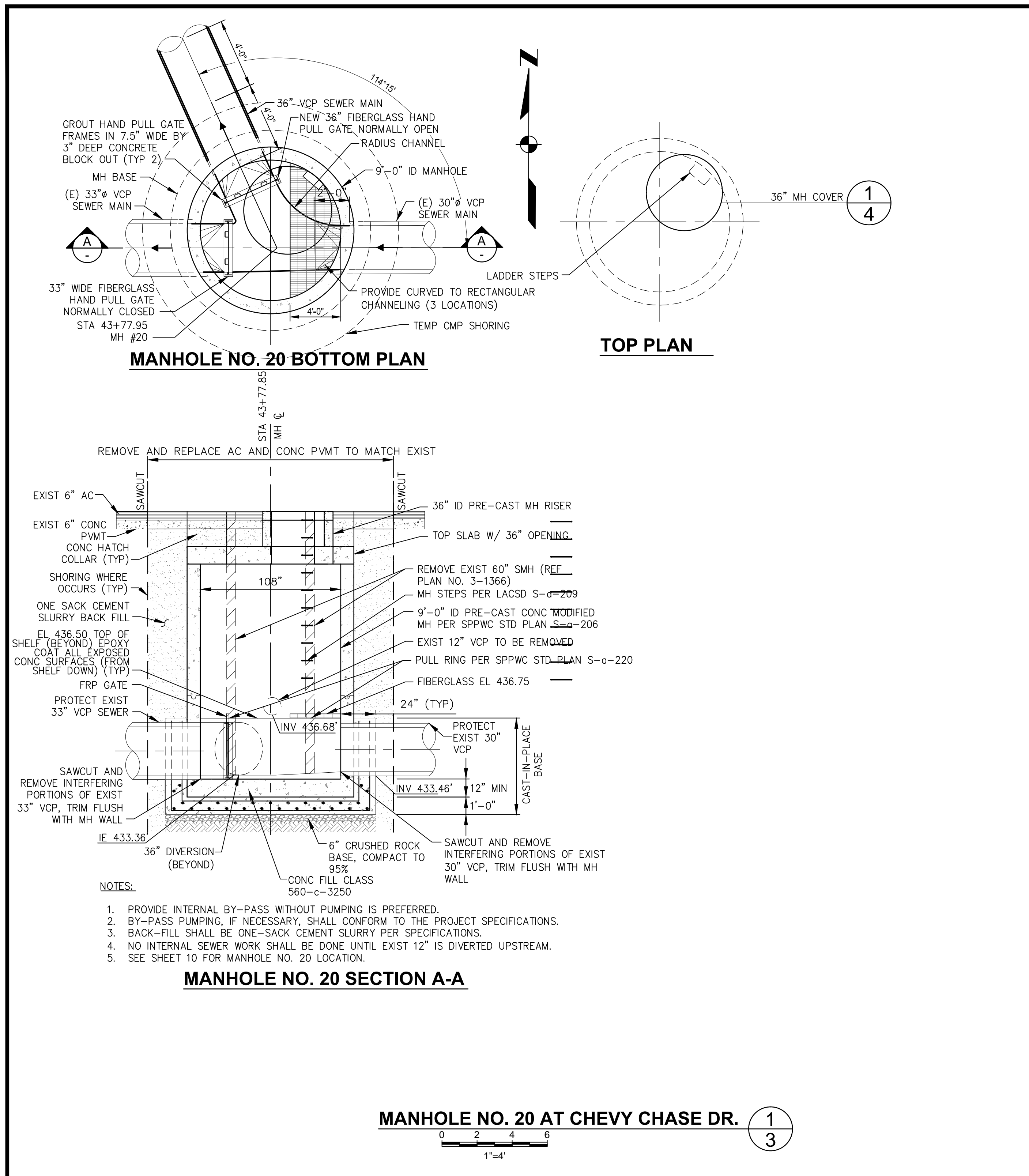
CHEVY CHASE SEWER DIVERSION PROJECT

**CONSTRUCTION DETAILS  
PARSHALL FLUME**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

**PLAN NO.  
3-1551**  
SHEET 2 OF 10 SHEETS



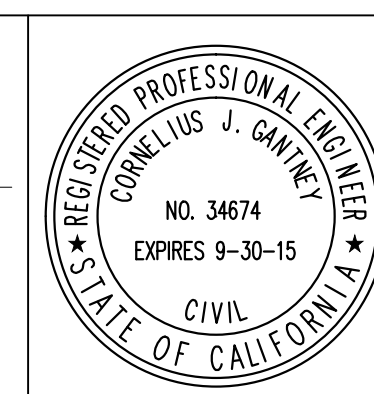


PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJJ JOB NO. 1283034.00



CHEVY CHASE SEWER DIVERSION PROJECT

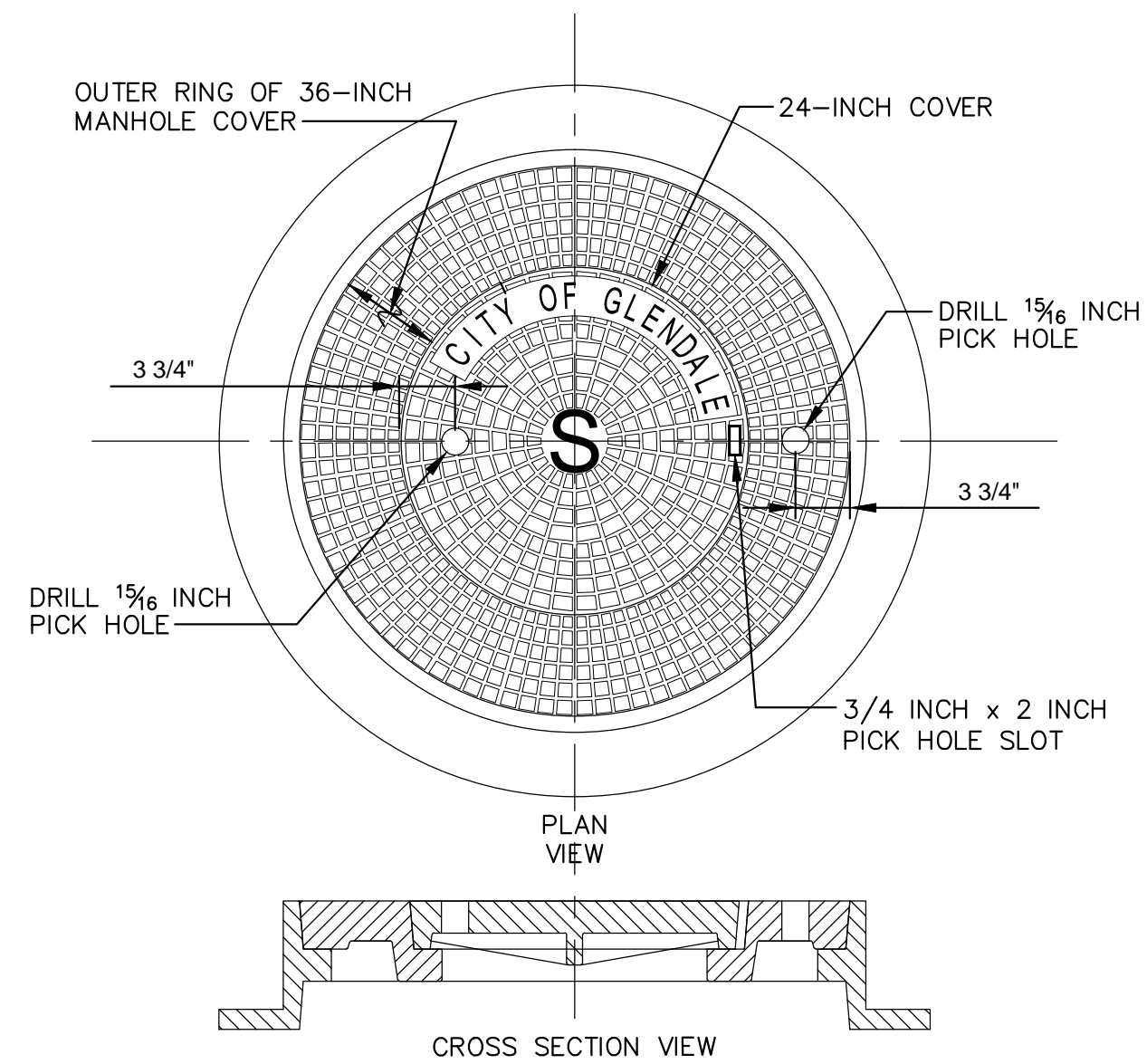
**CONSTRUCTION DETAILS**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

**PLAN NO.  
3-1551**

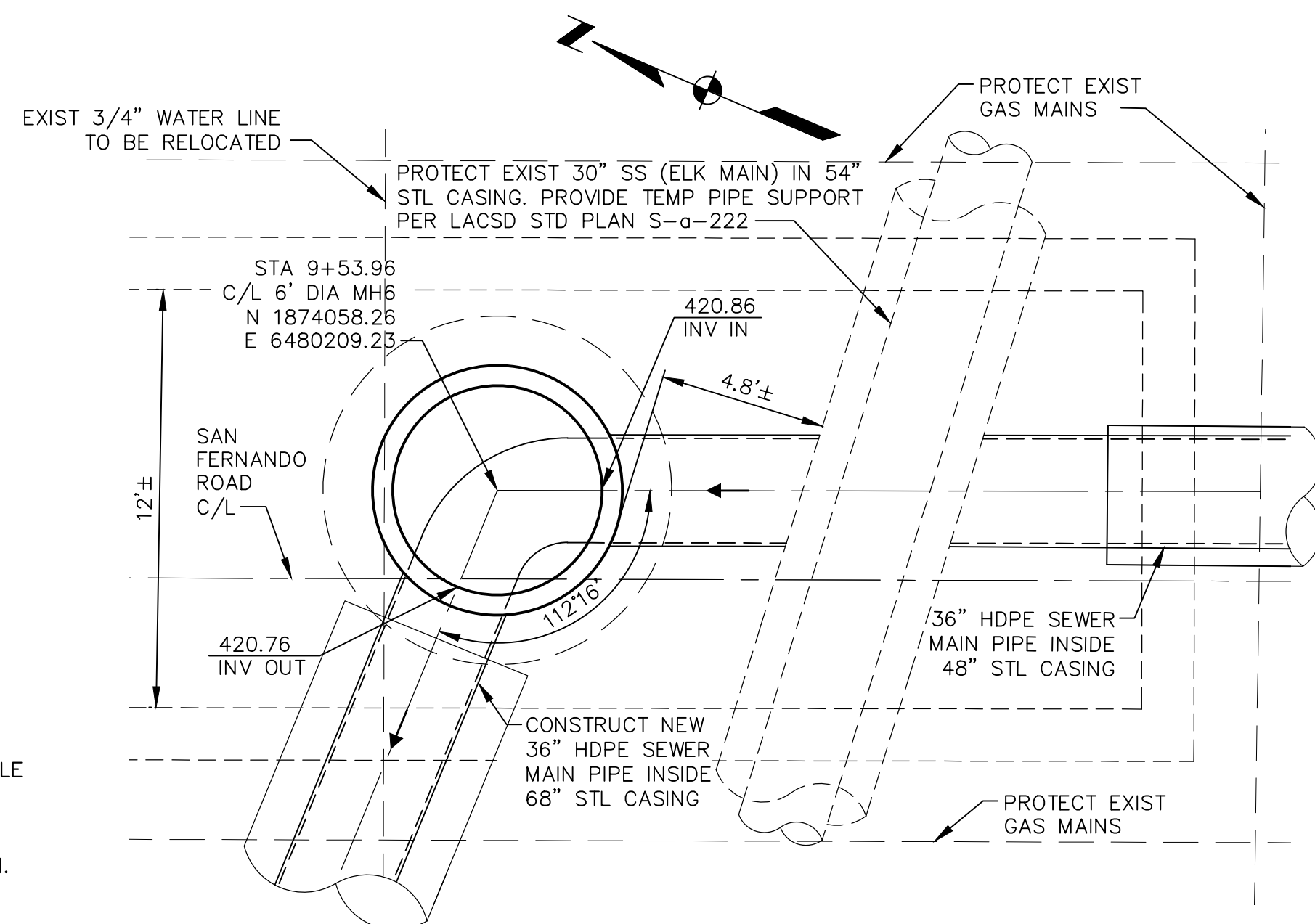
SHEET 3 OF 10 SHEETS



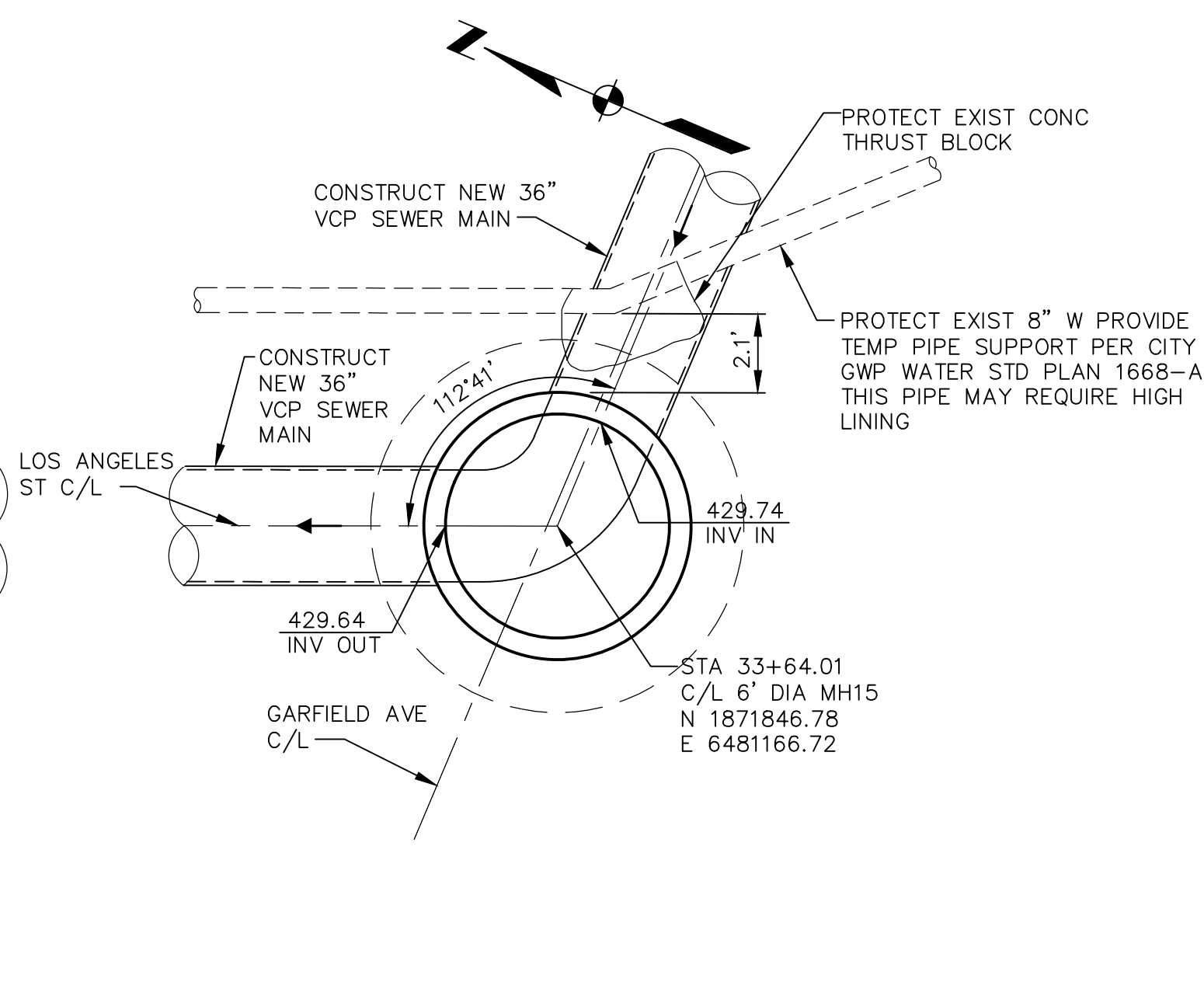


- NOTES**
- MANHOLE COVER AND FRAME (MHCF) SET: ALHAMBRA FOUNDRY 36-INCH MANHOLE COVER AND FRAME 3-PIECE SET, PLAN NO. A-1325 OR APPROVED EQUAL AND REVISED AS SHOWN HEREON.
  - ALL PARTS TO BE MANUFACTURED IN THE USA.
  - MHCF 3-PIECE SET FOR 5-FOOT DIAMETER MANHOLES ONLY OR LARGER SIZE MH.

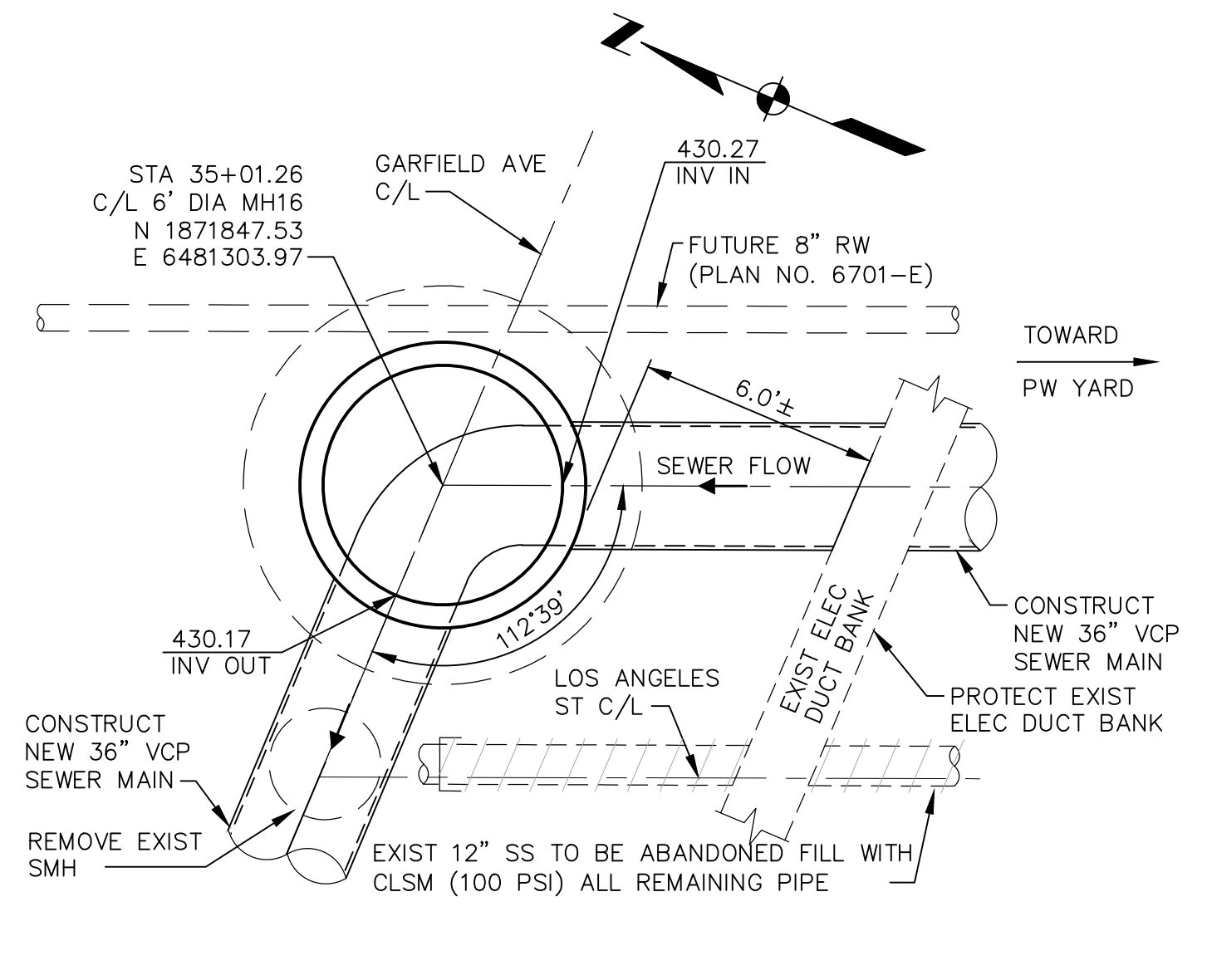
**MANHOLE COVER 1/4**  
SCALE: NONE



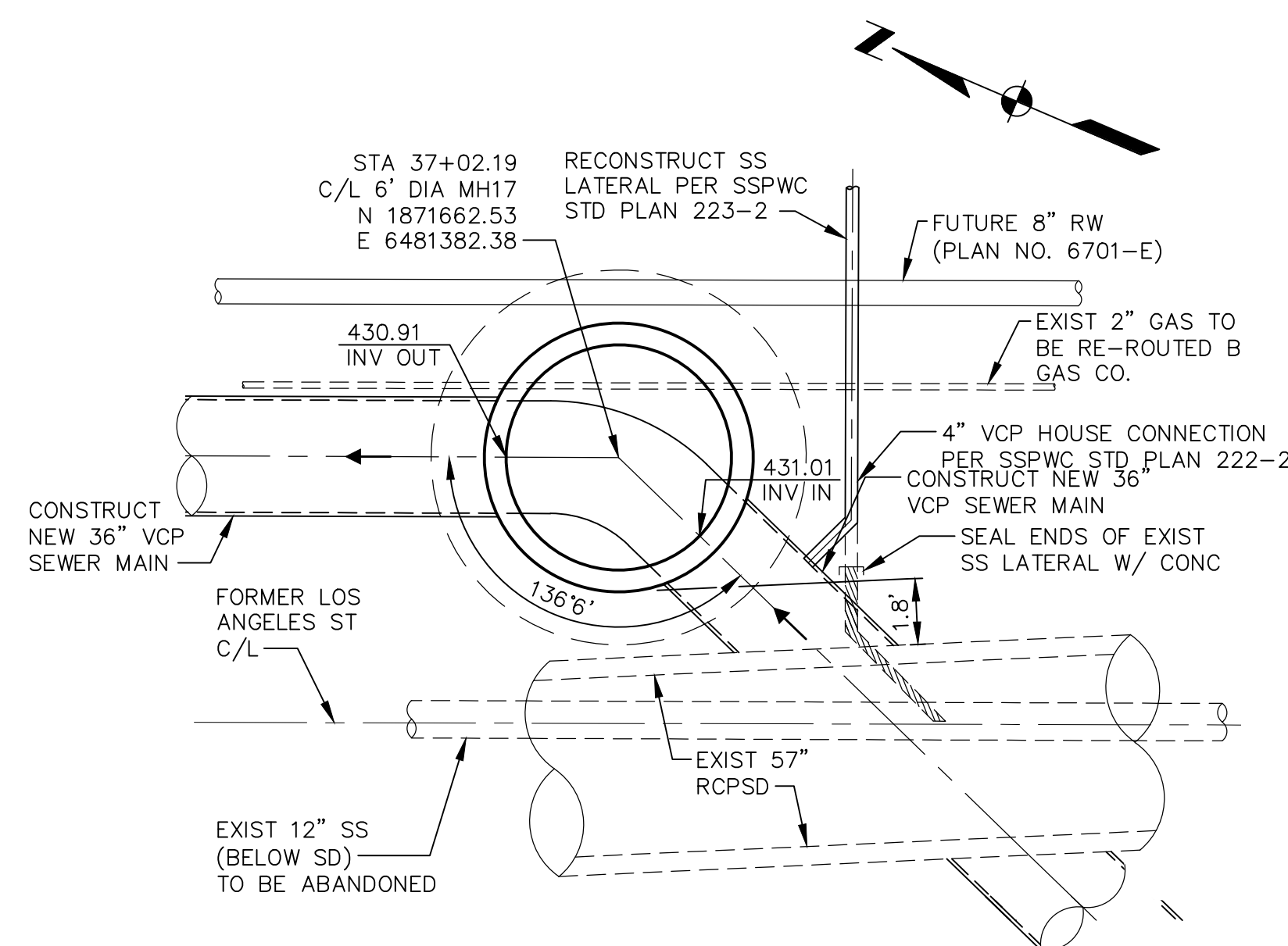
**MH NO. 6 BASE DETAIL (SAN FERNANDO RD AT ELK AVE) 2/4**  
1\"/>



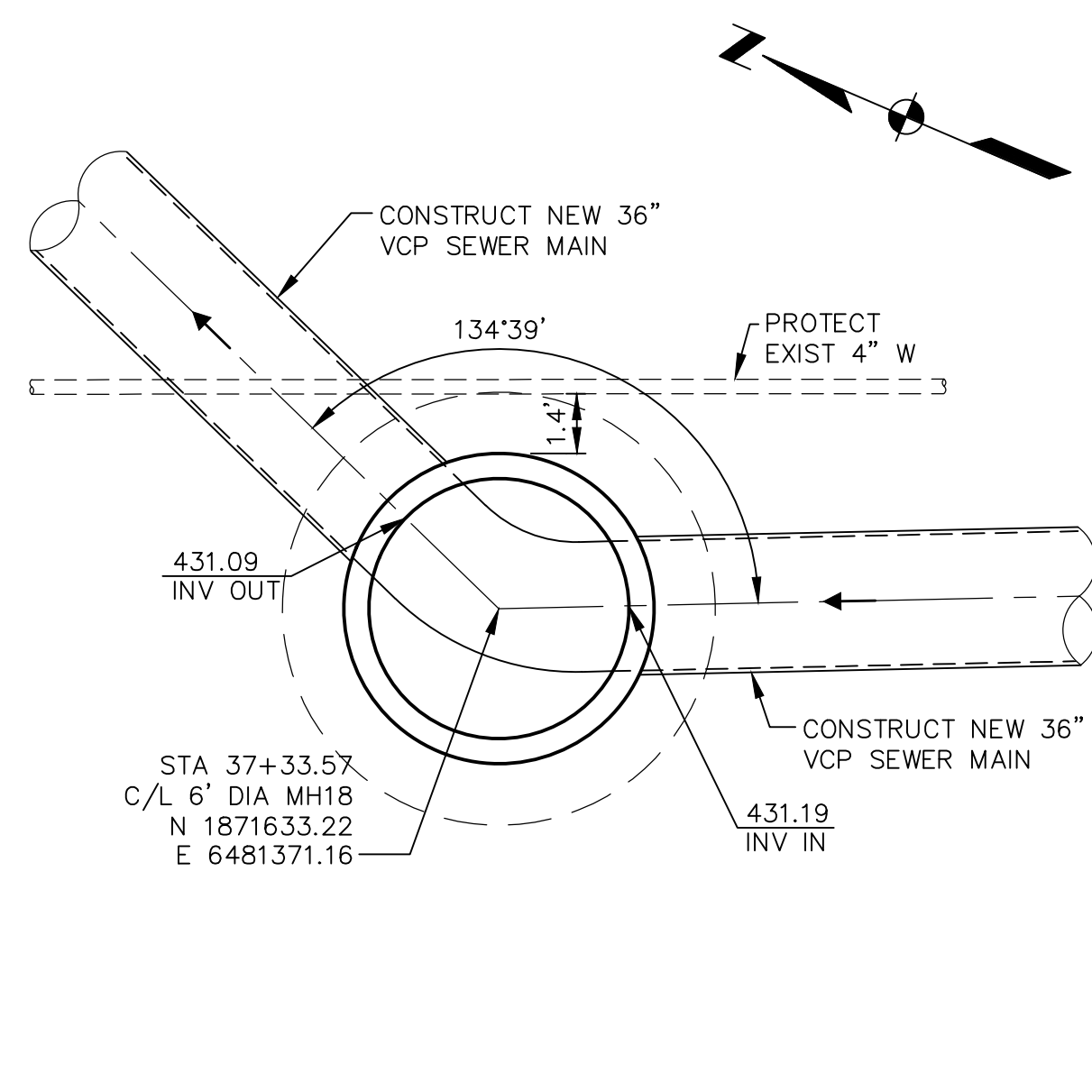
**MH NO. 15 BASE DETAIL (LA ST/GARFIELD ST) 3/4**  
1\"/>



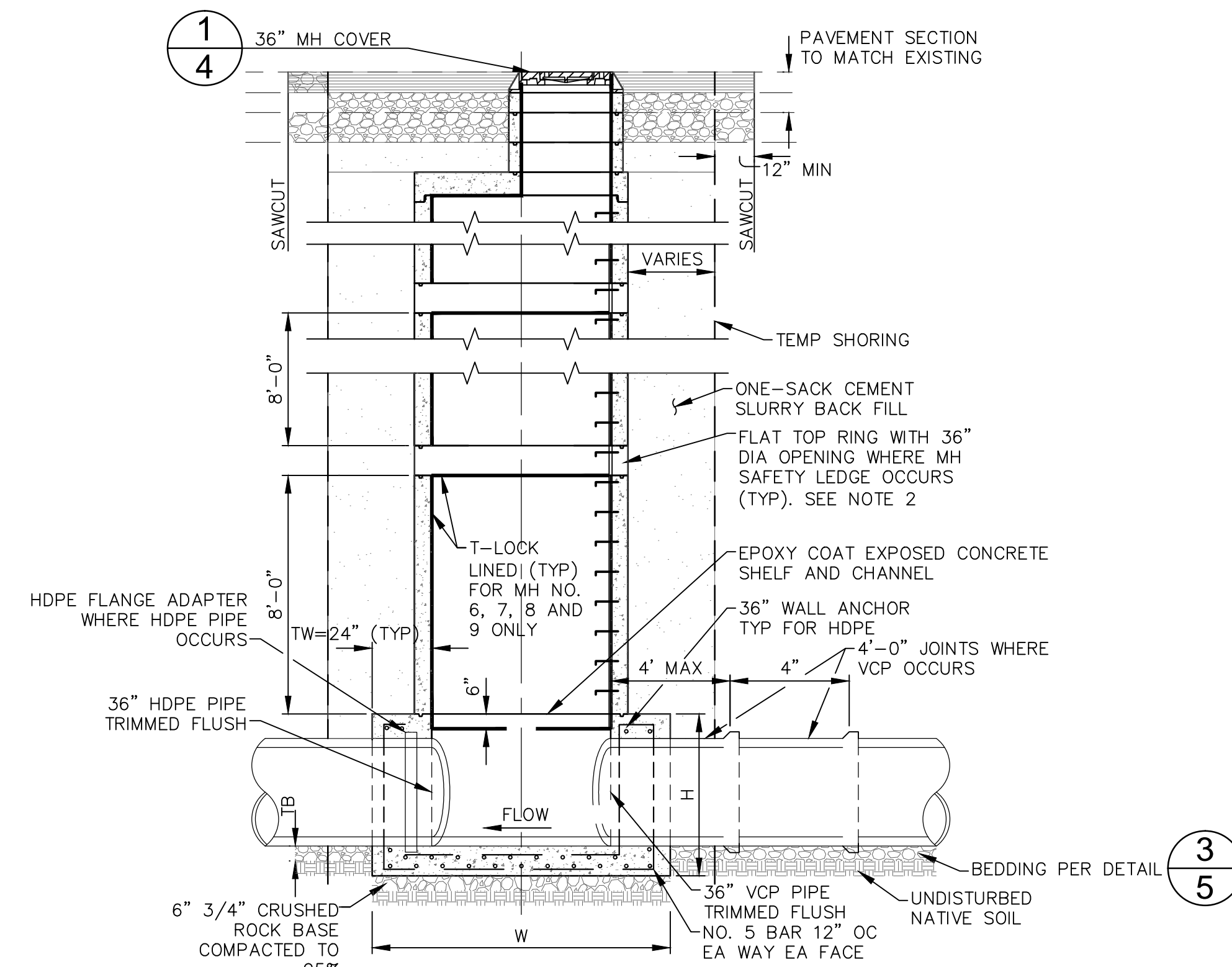
**MH NO. 16 BASE DETAIL (GARFIELD ST) 4/4**  
1\"/>



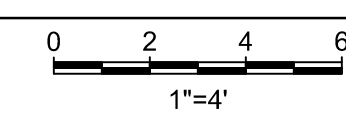
**MH NO. 17 BASE DETAIL PW YARD - NORTH SIDE 5/4**  
1\"/>



**MH NO. 18 BASE DETAIL (PW YARD - NORTH SIDE) 6/4**  
1\"/>



**TYPICAL 6-FOOT MANHOLE DETAIL 7/4**



**NOTES**

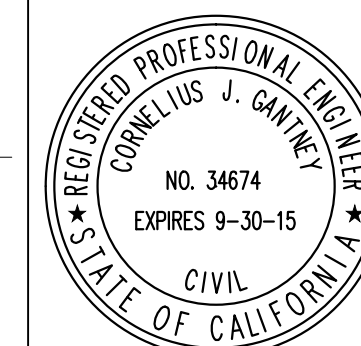
- LACSD STANDARD MANHOLE, TYPE "E" PER S-a-206, CASE 1. IS MODIFIED AS INDICATED IN THIS DETAIL.
- PROVIDE MANHOLE SAFETY LEDGE PER SSPWC STANDARD PLAN 330-2 FOR ALL MANHOLES WHERE DEPTH TO SHELF IS GREATER THAN 20'.
- PROVIDE ASPHALT TAPE SEALANT AT ALL PRECAST JOINTS.

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJ JOB No. 1283034.00



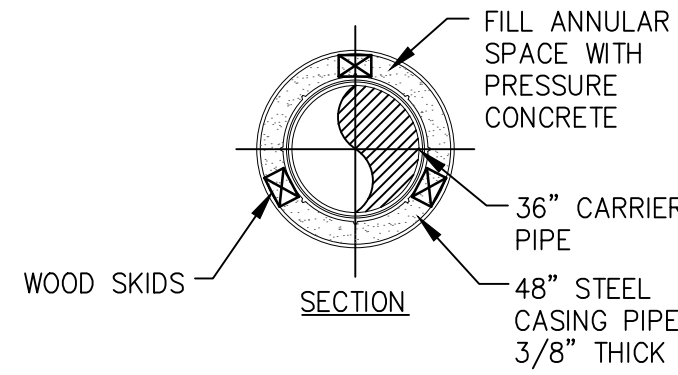
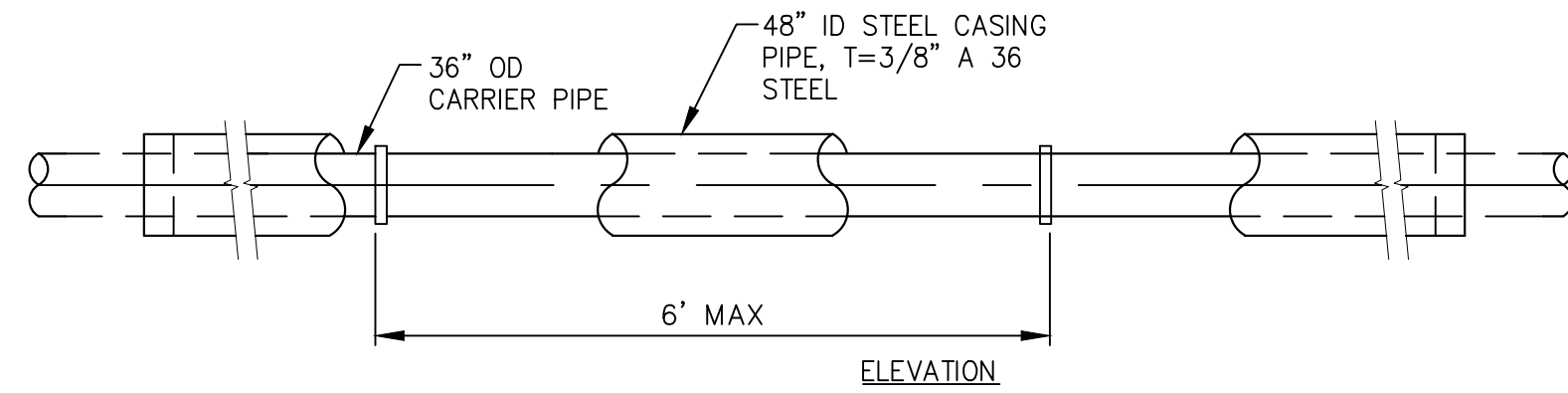
CHEVY CHASE SEWER DIVERSION PROJECT

**CONSTRUCTION DETAILS**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

**PLAN NO.  
3-1551**

SHEET 4 OF 10 SHEETS



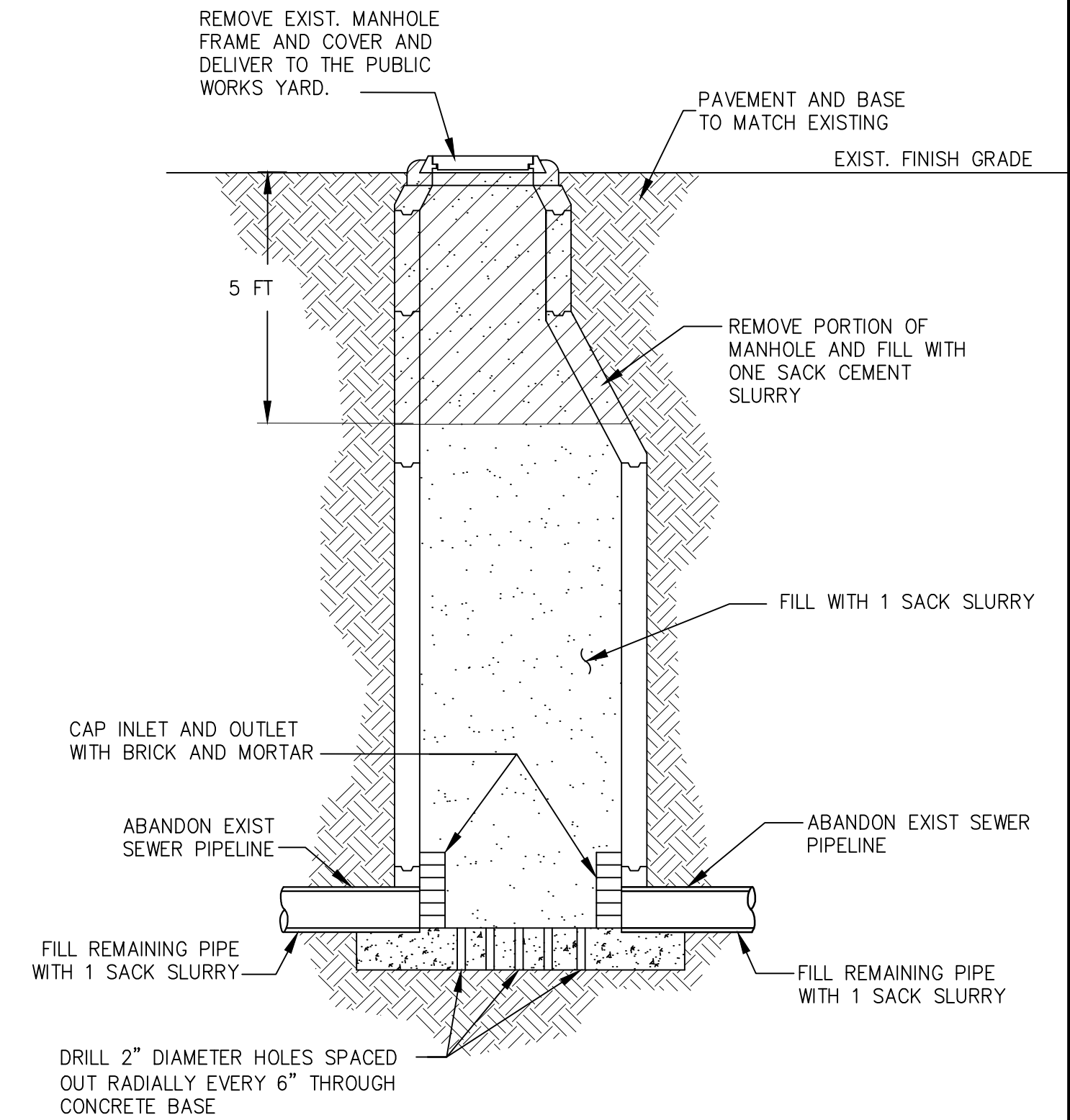
#### NOTES:

1. CASING SHALL CONFORM TO THE PROJECT SPECIFICATION NO.3445 SECTION 12.06.2.
2. SKIDS SHALL BE GREASED TO FACILITATE CARRIER PIPE INSTALLATION.
3. STEEL CASING IS 36 KSI, A-36 STEEL SPIRAL WELDED OR PERMALOCK STEEL PIPE . THICKNESS=3/8"(MIN) ID=48"
4. STEEL CASING SHALL BE INSTALLED BY EITHER HAND TUNNELING METHODS OR OPEN SHIELD PIPE JACKING METHODS.
5. CASING SPACERS SHALL BE PSI OR APPROVED EQUAL PER SPECIFICATION NO. 3445 SECTION 12.07.

#### STEEL CASING DETAIL

SCALE: NTS

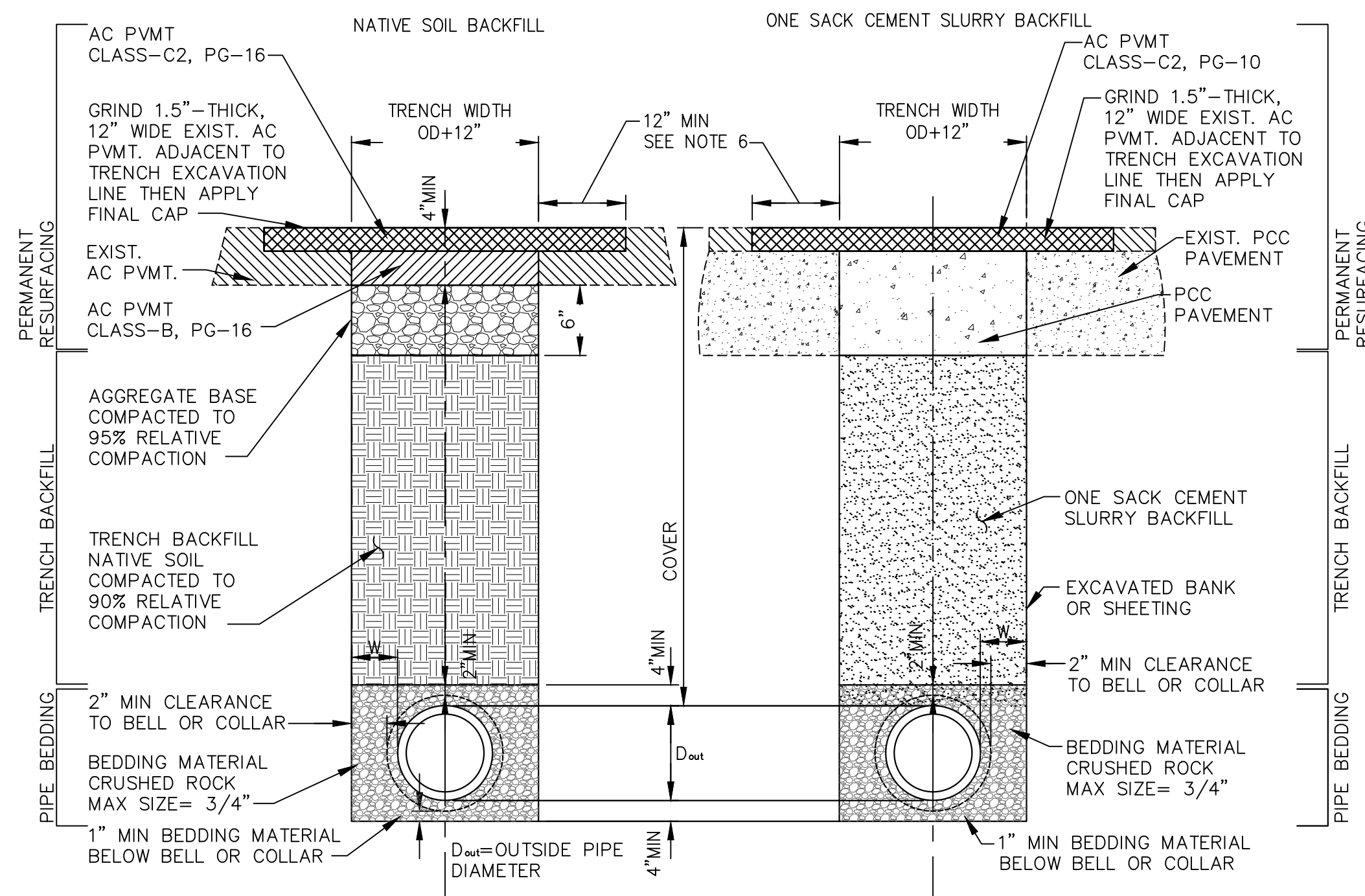
1  
5



#### MANHOLE ABANDONMENT DETAIL

SCALE: NTS

2  
5



#### NOTES:

1. "W" AT SPRING LINE SHALL NOT BE LESS THAN 6" FOR ANY DEPTH OF TRENCH.
2. WHERE COVER IS 8" OR LESS, W MEASURED AT TOP OF PIPE MAY BE ANY DIMENSION GREATER THAN 6".
3. WHERE COVER IS GREATER THAN 8", W MEASURED AT TOP OF PIPE SHALL NOT BE GREATER THAN 8".
4. SCREED BEDDING MATERIAL TO FIT CURVATURE AND GRADE OF PIPE.
5. CONTRACTOR AT HIS OWN EXPENSE CAN BACKFILL TRENCH WITH SLURRY MIX ON TYBURN ST. IN LIEU OF NATIVE SOIL BEYOND THE LIMITS SPECIFIED ON THE PLAN.
6. PERMANENT RESURFACING SHALL BE DONE ONE (1) WEEK AFTER BACKFILLING OF TRENCHES HAS BEEN COMPLETED AND THE FILL SURFACE HAS DRIED. FOR AC/PCC PAVEMENT, A 12-INCH WIDE STRIP OF PAVEMENT SHALL BE SAW CUT AND/OR GRINDED AROUND THE TRENCH. ALL CUTS SHALL BE CLEAN AND STRAIGHT.
7. PERMANENT RESURFACING SHALL CONSIST OF 1.5" THICK ASPHALT CONCRETE, TYPE C2 PG-10 PAVEMENT (FINAL CAP) PLACED OVER ASPHALT CONCRETE PAVEMENT BASE COURSE TYPE B PG-10. THE AC PAVEMENT THICKNESS SHALL MATCH THICKNESS OF EXISTING PAVEMENT BUT NOT LESS THAN 4". WHERE EXISTING AC PAVEMENT IS PLACED OVER PCC BASE PAVEMENT, THE PCC PAVEMENT SHALL BE REPLACED WITH PCC PAVEMENT CLASS 560-C-3250 TO MATCH EXISTING THICKNESS BUT NOT LESS THAN 6".
8. AFTER FINAL PAVING, ALL THE JOINT EDGES SHALL BE SEALED WITH TACK COAT TO THE SATISFACTION OF THE ENGINEERS.

#### TRENCH DETAILS (PIPE BEDDING, BACKFILL AND RESURFACING)

SCALE: NTS

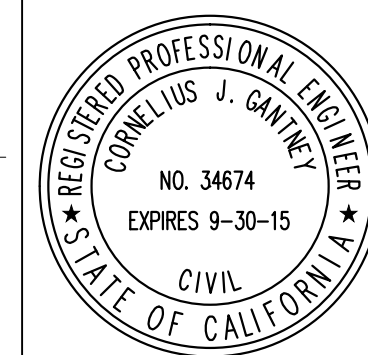
3  
5

PLANS PREPARED BY:

Kennedy/Jenks Consultants

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJ JOB No. 1283034.00

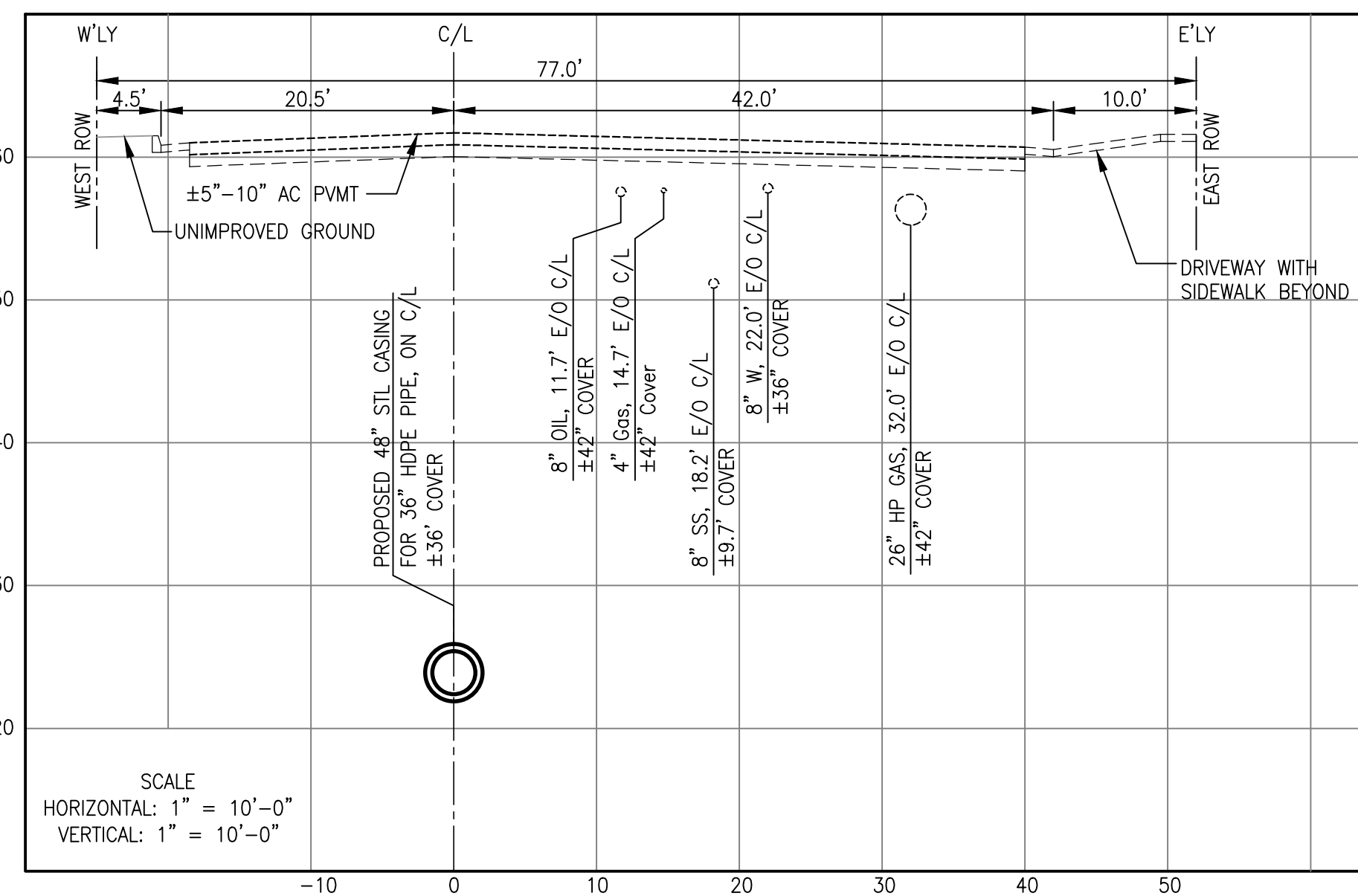
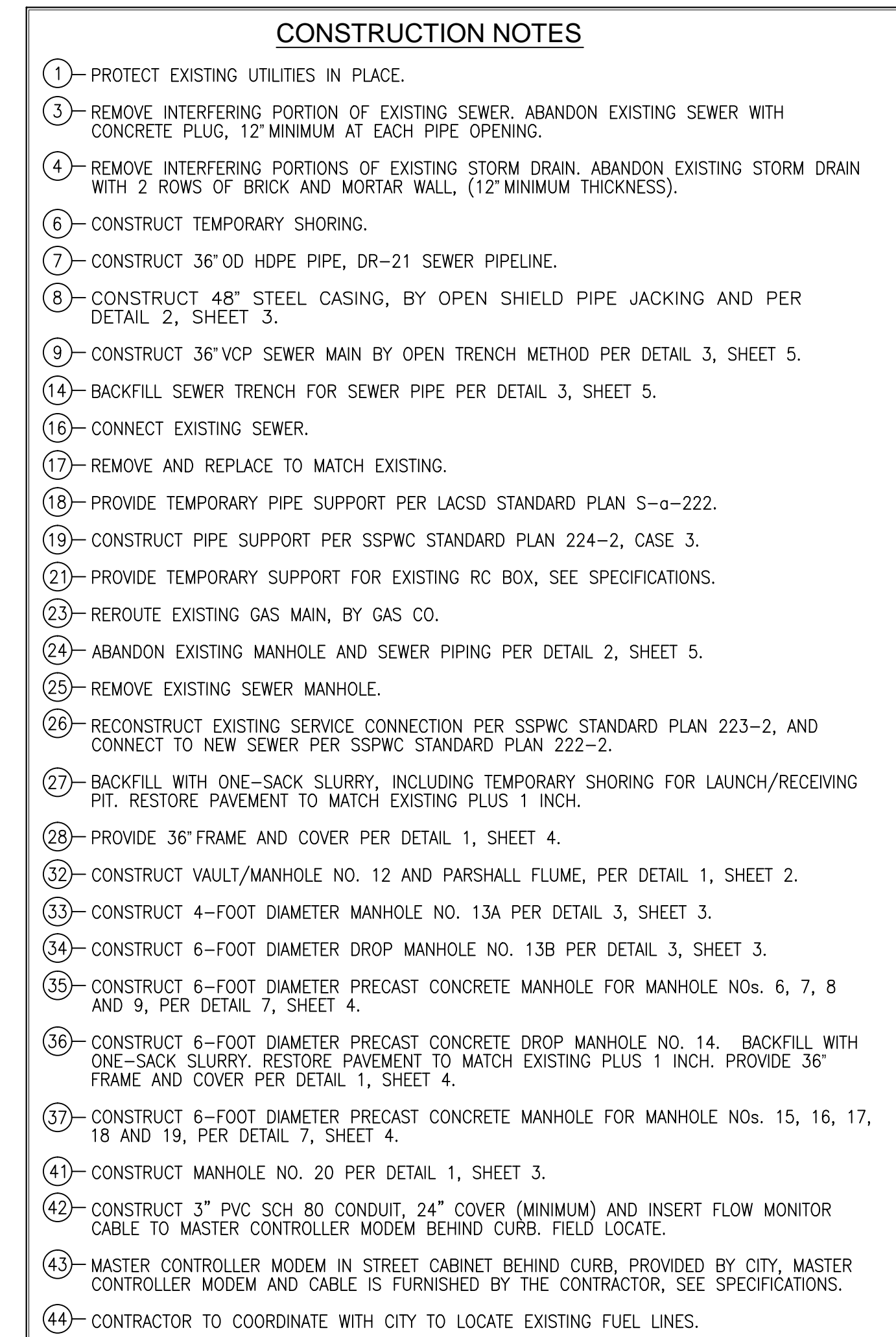


CHEVY CHASE SEWER DIVERSION PROJECT

CONSTRUCTION DETAILS

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

PLAN NO.  
3-1551  
SHEET 5 OF 10 SHEETS



BM 2485 SAN FERNANDO RD. WEST & COLORADO BLVD  
SPK. IN LEAD @ BACK OF E'LY CURB SAN FERNANDO  
RD. WEST @ S'LY SIDE OF BRIDGE  
CHSLD. "BM" 460.38

1 CROSS-SECTION AT STA 15+37  
6 SAN FERNANDO RD

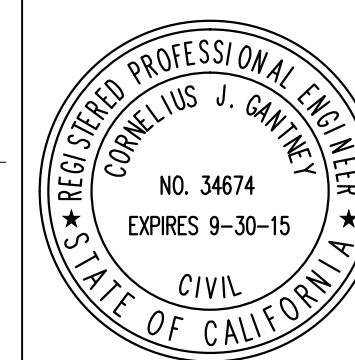
NOTES:  
1. SEE GENERAL NOTES ON SHEET 1, NOTE 23 FOR  
GEOTECHNICAL REPORT AND RECOMMENDATIONS.

PLAN AND PROFILE  
STA 9+54.00 TO STA 17+00

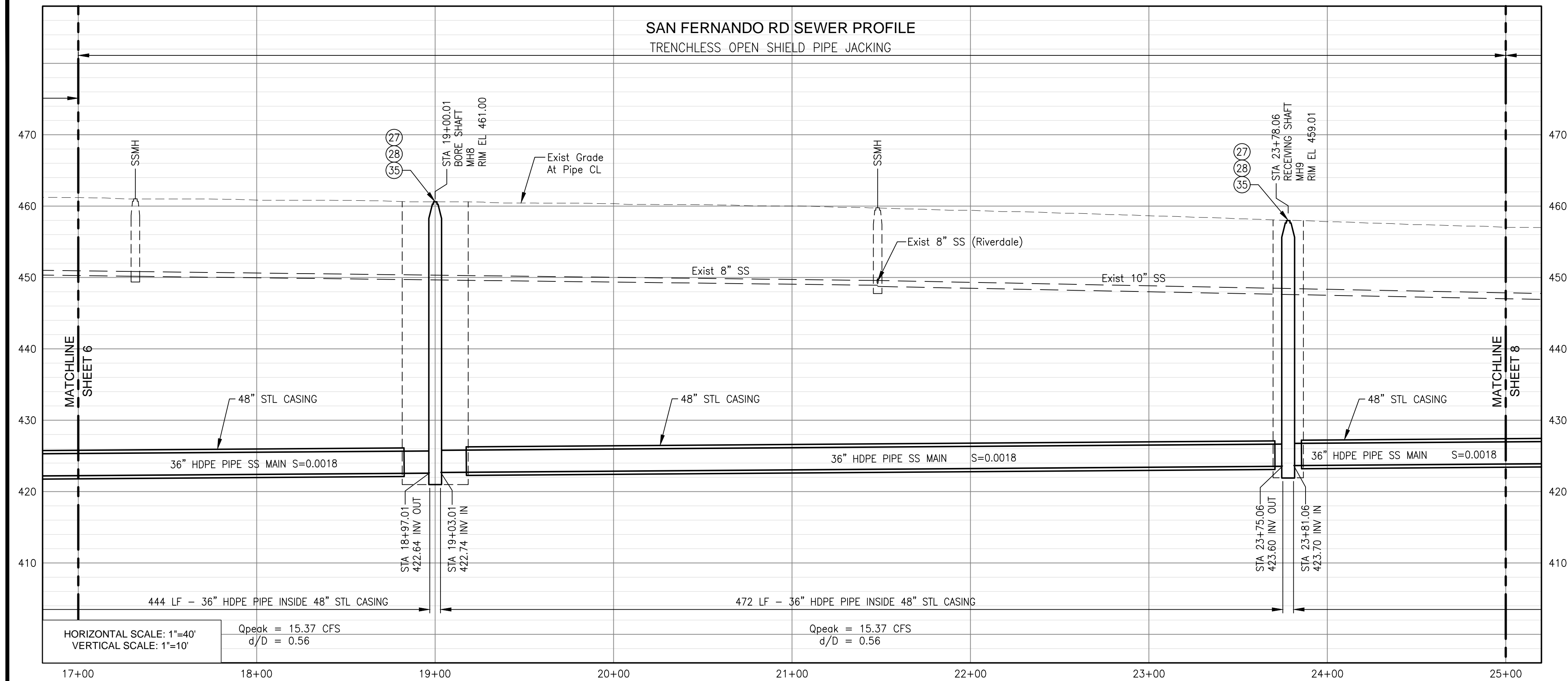
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

PLAN NO.  
3-1551  
SHEET 6 OF 10 SHEETS

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300







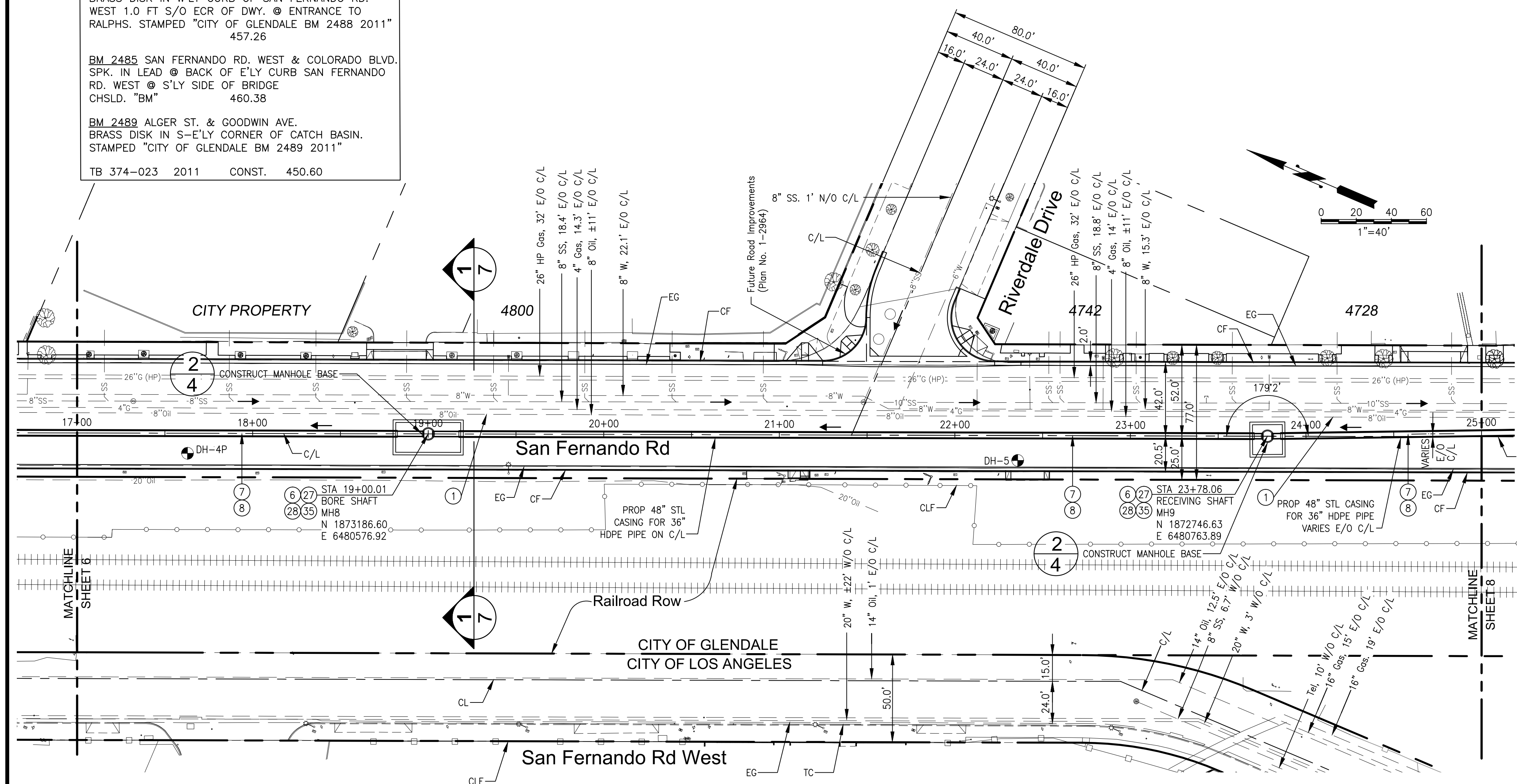
**BENCH MARKS**

BM 2488 SAN FERNANDO RD. WEST @ RES. # 4841  
BRASS DISK IN W'LY CURB OF SAN FERNANDO RD.  
WEST 1.0 FT S/O ECR OF DWY. @ ENTRANCE TO  
RALPHS. STAMPED "CITY OF GLENDALE BM 2488 2011"  
457.26

BM 2485 SAN FERNANDO RD. WEST & COLORADO BLVD.  
SPK. IN LEAD @ BACK OF E'LY CURB SAN FERNANDO  
RD. WEST @ S'LY SIDE OF BRIDGE  
CHSLD. "BM" 460.38

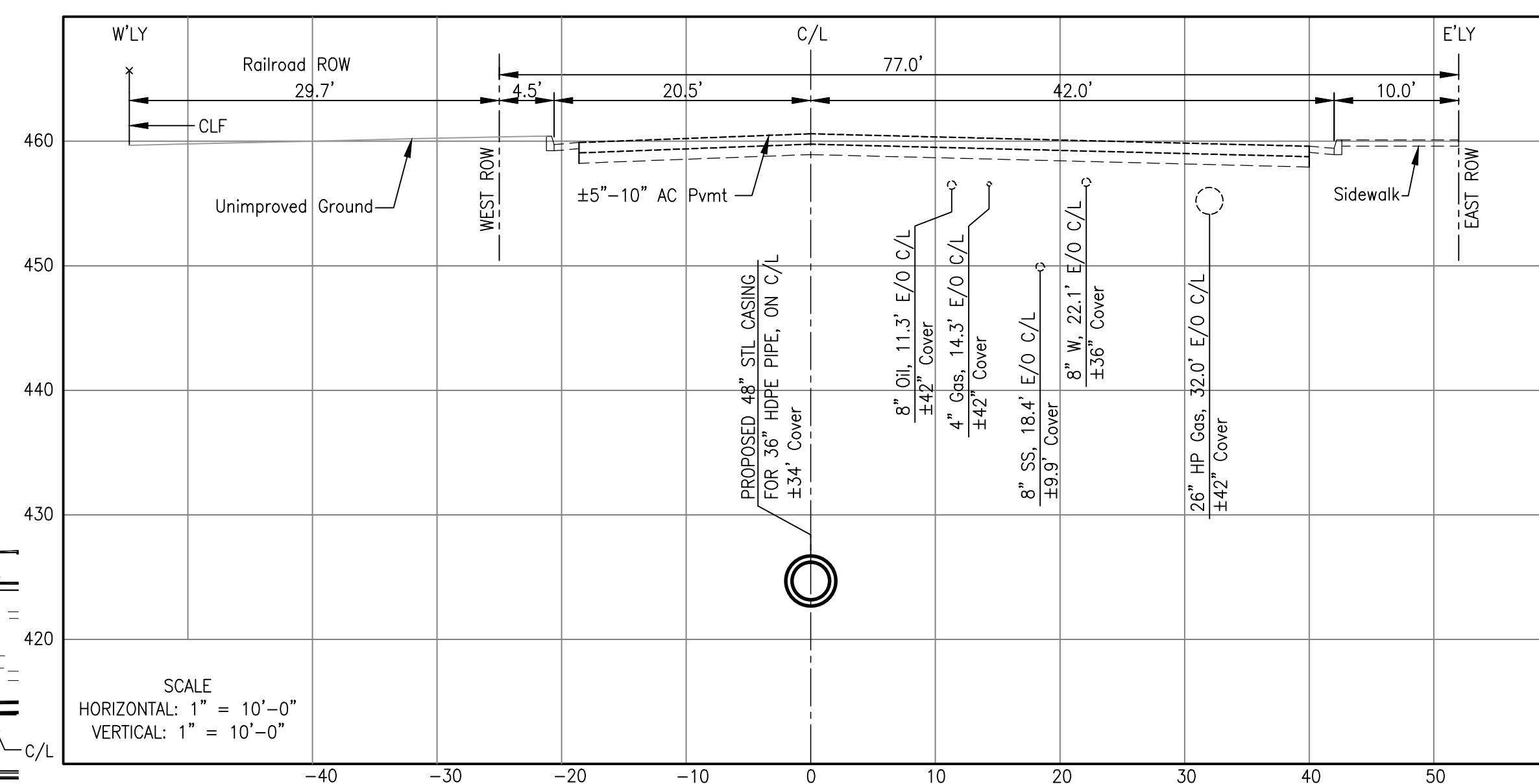
BM 2489 ALGER ST. & GOODWIN AVE.  
BRASS DISK IN S-E'LY CORNER OF CATCH BASIN.  
STAMPED "CITY OF GLENDALE BM 2489 2011"

TB 374-023 2011 CONST. 450.60



**CONSTRUCTION NOTES**

- 1- PROTECT EXISTING UTILITIES IN PLACE.
- 3- REMOVE INTERFERING PORTION OF EXISTING SEWER. ABANDON EXISTING SEWER WITH CONCRETE PLUG, 12" MINIMUM AT EACH PIPE OPENING.
- 4- REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN. ABANDON EXISTING STORM DRAIN WITH 2 ROWS OF BRICK AND MORTAR WALL, (12" MINIMUM THICKNESS).
- 6- CONSTRUCT TEMPORARY SHORING.
- 7- CONSTRUCT 36" OD HDPE PIPE, DR-21 SEWER PIPELINE.
- 8- CONSTRUCT 48" STEEL CASING, BY OPEN SHIELD PIPE JACKING AND PER DETAIL 2, SHEET 3.
- 9- CONSTRUCT 36" VCP SEWER MAIN BY OPEN TRENCH METHOD PER DETAIL 3, SHEET 5.
- 14- BACKFILL SEWER TRENCH FOR SEWER PIPE PER DETAIL 3, SHEET 5.
- 16- CONNECT EXISTING SEWER.
- 17- REMOVE AND REPLACE TO MATCH EXISTING.
- 18- PROVIDE TEMPORARY PIPE SUPPORT PER LACSD STANDARD PLAN S-a-222.
- 19- CONSTRUCT PIPE SUPPORT PER SSPWC STANDARD PLAN 224-2, CASE 3.
- 21- PROVIDE TEMPORARY SUPPORT FOR EXISTING RC BOX, SEE SPECIFICATIONS.
- 23- REROUTE EXISTING GAS MAIN, BY GAS CO.
- 24- ABANDON EXISTING MANHOLE AND SEWER PIPING PER DETAIL 2, SHEET 5.
- 25- REMOVE EXISTING SEWER MANHOLE.
- 26- RECONSTRUCT EXISTING SERVICE CONNECTION PER SSPWC STANDARD PLAN 223-2, AND CONNECT TO NEW SEWER PER SSPWC STANDARD PLAN 222-2.
- 27- BACKFILL WITH ONE-SACK SLURRY, INCLUDING TEMPORARY SHORING FOR LAUNCH/RECEIVING PIT. RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH.
- 28- PROVIDE 36" FRAME AND COVER PER DETAIL 1, SHEET 4.
- 32- CONSTRUCT VAULT/MANHOLE NO. 12 AND PARSHALL FLUME, PER DETAIL 1, SHEET 2.
- 33- CONSTRUCT 4-FOOT DIAMETER MANHOLE NO. 13A PER DETAIL 3, SHEET 3.
- 34- CONSTRUCT 6-FOOT DIAMETER DROP MANHOLE NO. 13B PER DETAIL 3, SHEET 3.
- 35- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE FOR MANHOLE NOS. 6, 7, 8 AND 9, PER DETAIL 7, SHEET 4.
- 36- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE DROP MANHOLE NO. 14. BACKFILL WITH ONE-SACK SLURRY. RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH. PROVIDE 36" FRAME AND COVER PER DETAIL 1, SHEET 4.
- 37- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE FOR MANHOLE NOS. 15, 16, 17, 18 AND 19, PER DETAIL 7, SHEET 4.
- 41- CONSTRUCT MANHOLE NO. 20 PER DETAIL 1, SHEET 3.
- 42- CONSTRUCT 3" PVC SCH 80 CONDUIT, 24" COVER (MINIMUM) AND INSERT FLOW MONITOR CABLE TO MASTER CONTROLLER MODEM BEHIND CURB. FIELD LOCATE.
- 43- MASTER CONTROLLER MODEM IN STREET CABINET BEHIND CURB, PROVIDED BY CITY, MASTER CONTROLLER MODEM AND CABLE IS FURNISHED BY THE CONTRACTOR, SEE SPECIFICATIONS.
- 44- CONTRACTOR TO COORDINATE WITH CITY TO LOCATE EXISTING FUEL LINES.



**1**  
**7** CROSS-SECTION AT STA 19+26  
SAN FERNANDO RD

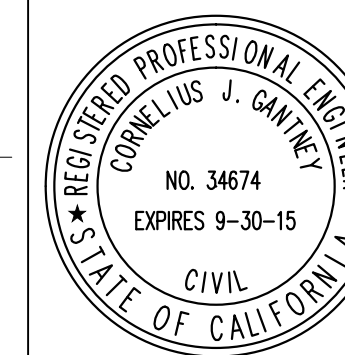
NOTES:  
1. SEE GENERAL NOTES ON SHEET 1, NOTE 23 FOR  
GEOTECHNICAL REPORT AND RECOMMENDATIONS.

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJ JOB No. 1283034.00



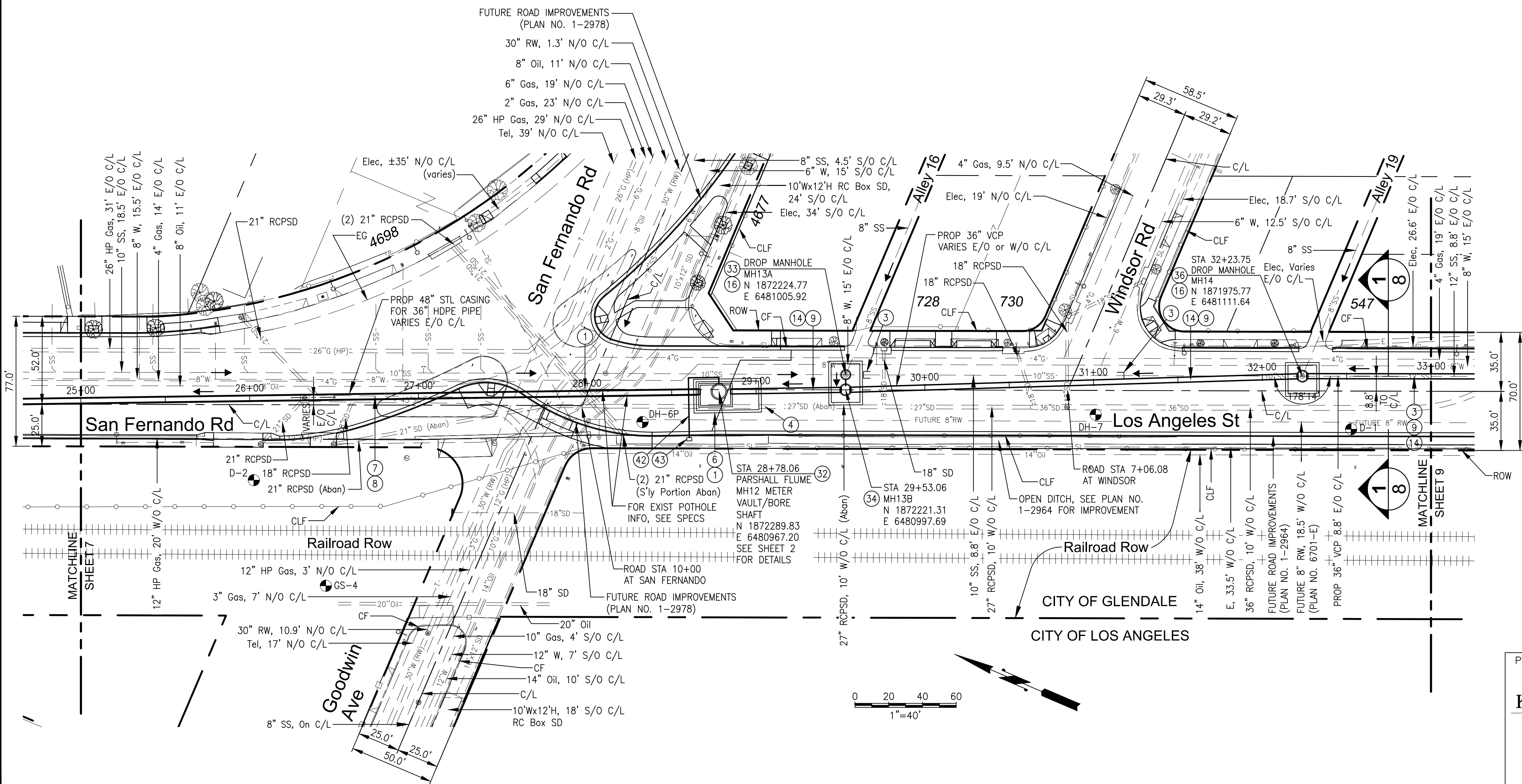
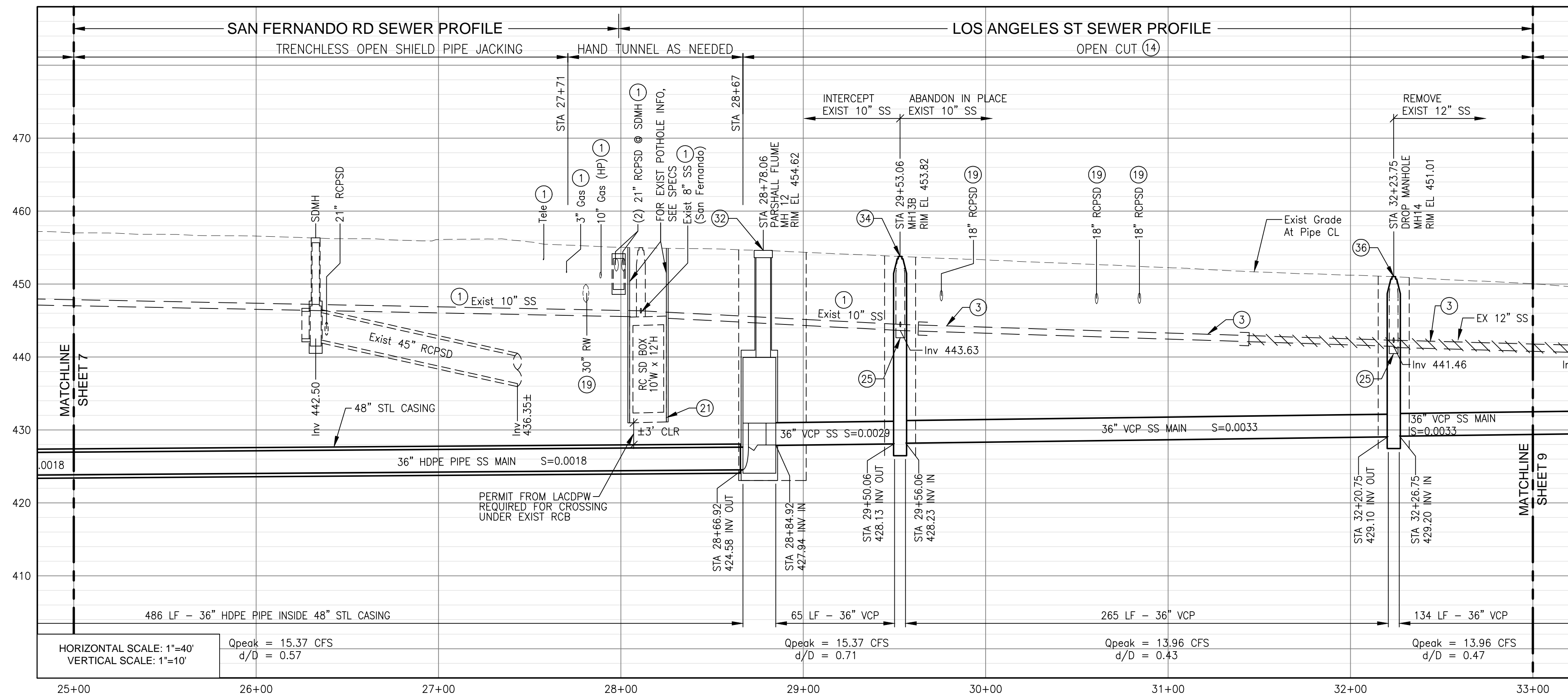
**CHEVY CHASE SEWER DIVERSION PROJECT**

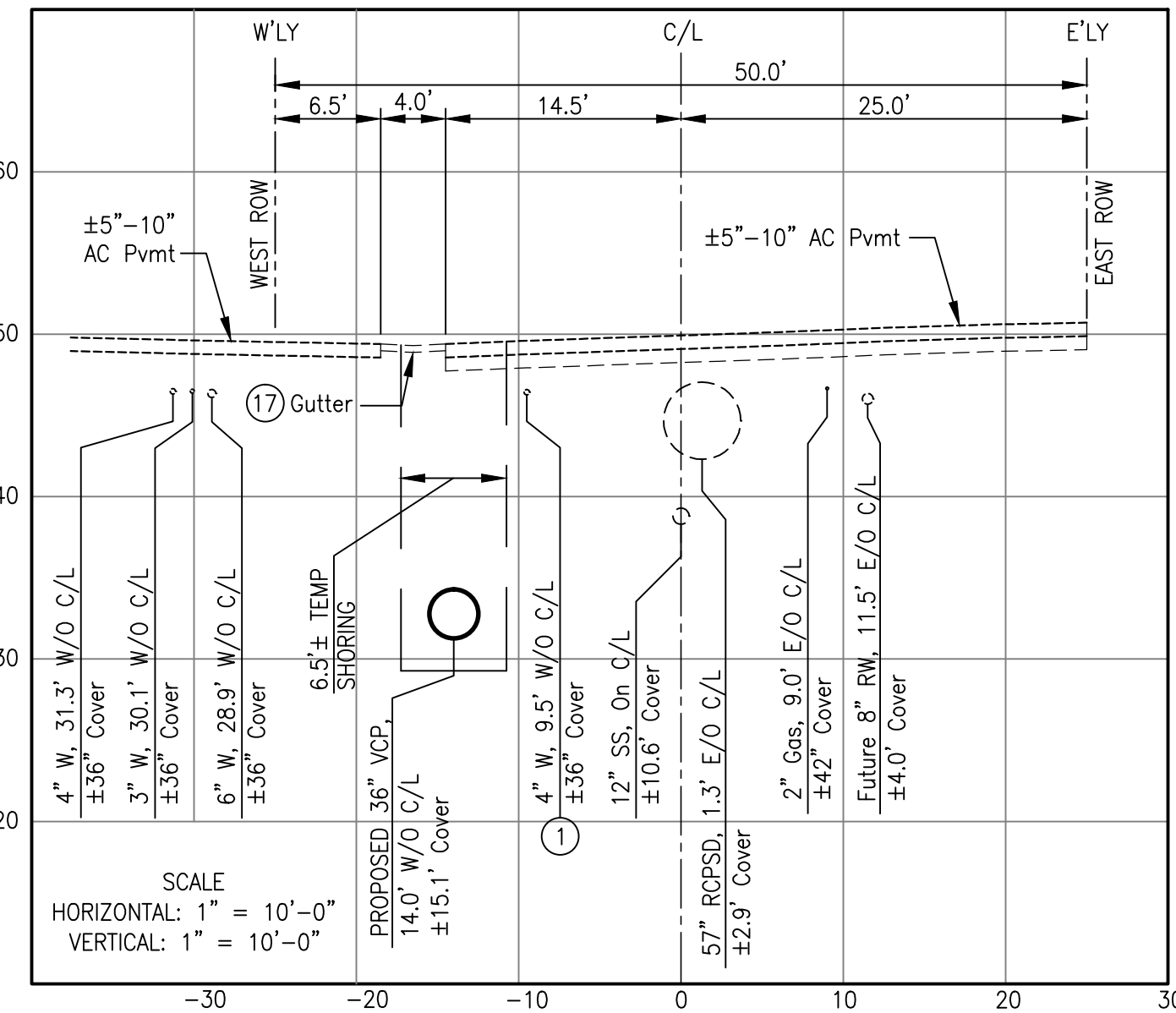
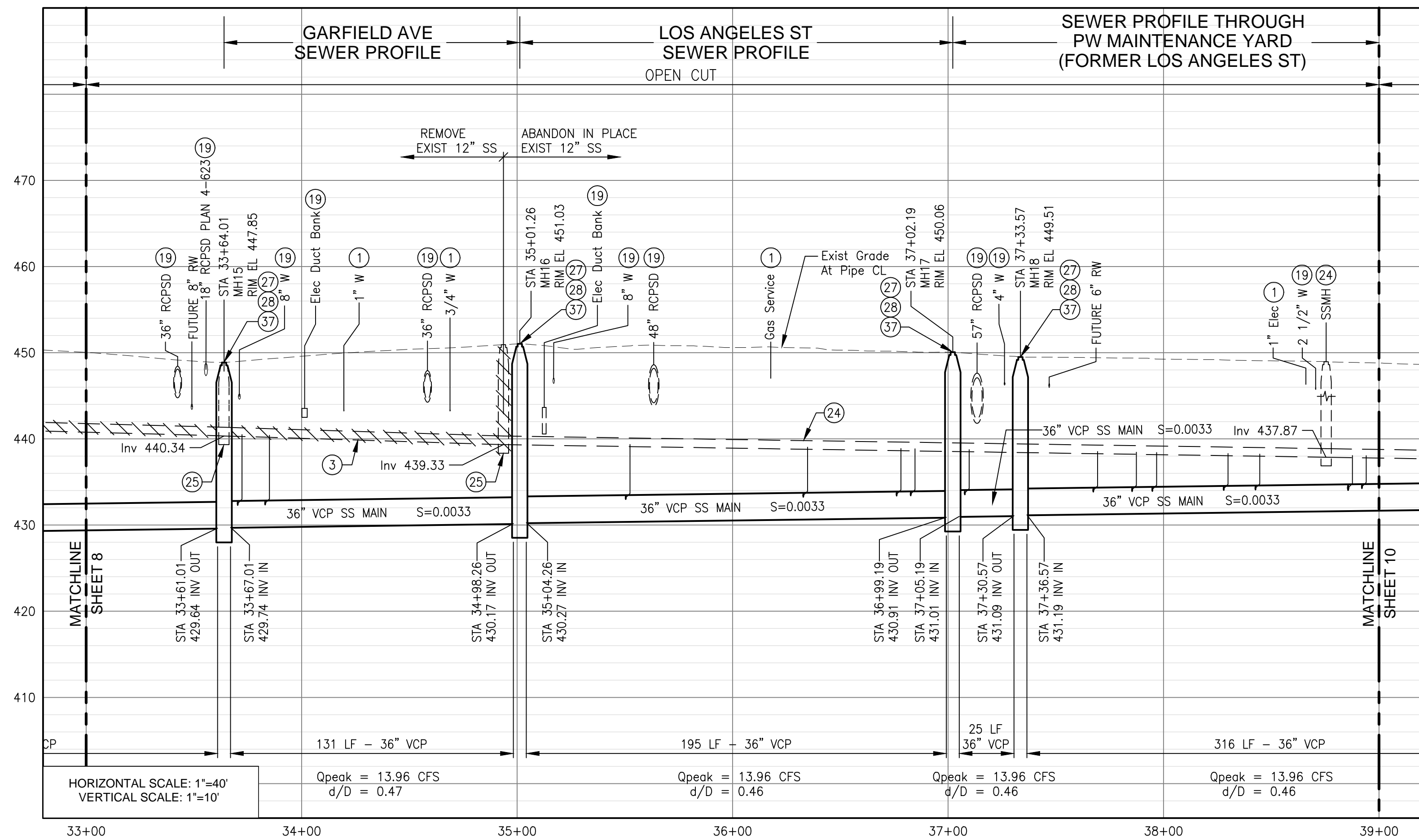
**PLAN AND PROFILE**  
**STA 17+00 TO STA 25+00**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

**PLAN NO.**  
**3-1551**  
**SHEET 7 OF 10 SHEETS**



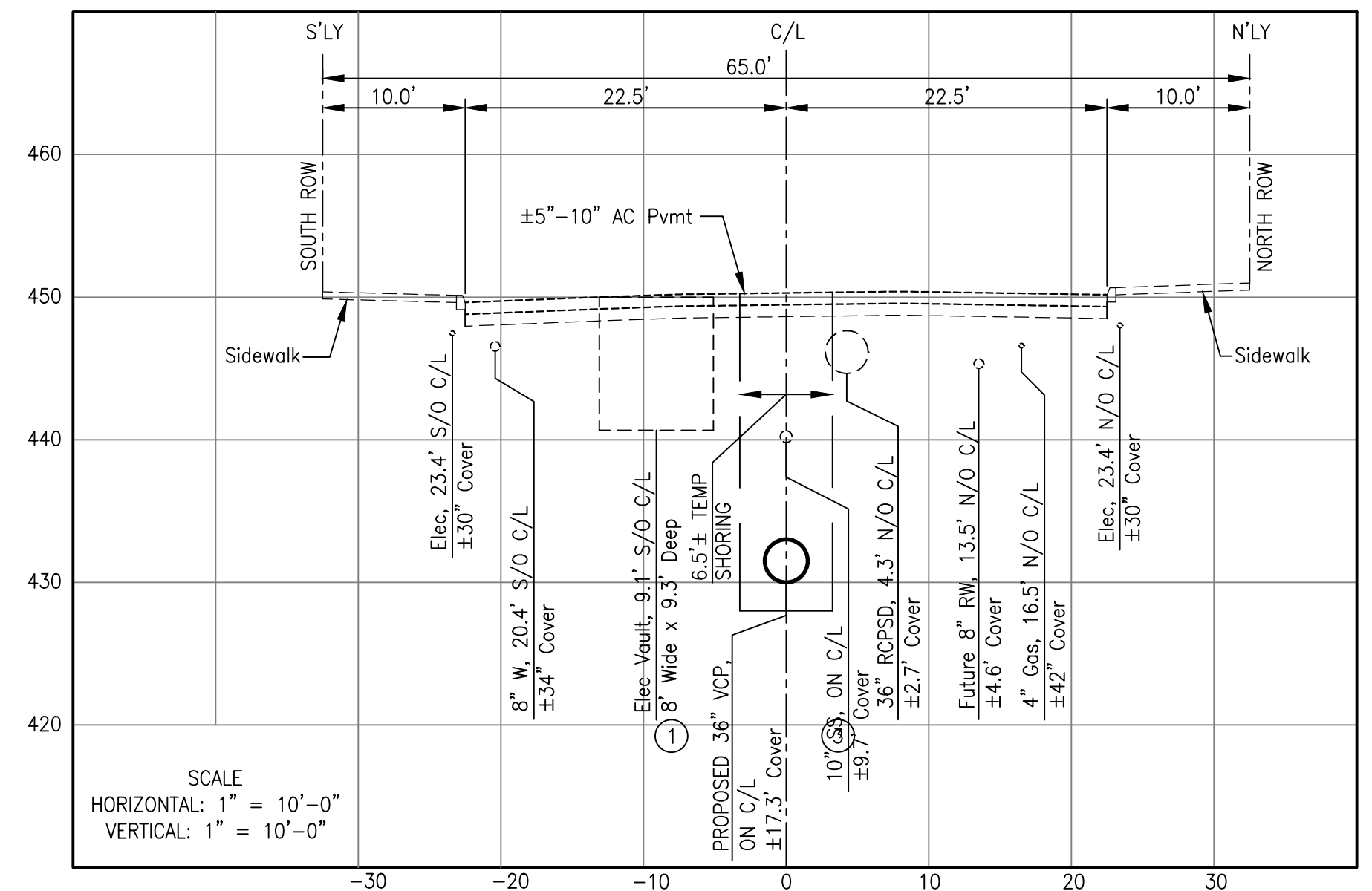




### BENCH MARKS

**BM 2495 SAN FERNANDO RD & GARFIELD AVE**  
BRASS DISK IN S'LY HEADWALL OF CATCH BASIN IN W'LY CURB OF SAN FERNANDO RD 13.0 FT N'LY OF BCR N-W'LY CORNER. STAMPED 'BM 2495 2011'  
2011 CONST 458.26

**BM 2494 GARFIELD AVE & LOS ANGELES ST**  
BRASS DISK IN W'LY HEADWALL OF CATCH BASIN IN S'LY CURB OF GARFIELD AVE 5.0 FT E'LY OF BCR S-E'LY CORNER. STAMPED 'BM 2494 2011'  
2011 CONST 451.64



### CONSTRUCTION NOTES

- PROTECT EXISTING UTILITIES IN PLACE.
- REMOVE INTERFERING PORTION OF EXISTING SEWER. ABANDON EXISTING SEWER WITH CONCRETE PLUG, 12" MINIMUM AT EACH PIPE OPENING.
- REMOVE INTERFERING PORTIONS OF EXISTING STORM DRAIN. ABANDON EXISTING STORM DRAIN WITH 2 ROWS OF BRICK AND MORTAR WALL, (12" MINIMUM THICKNESS).
- CONSTRUCT TEMPORARY SHORING.
- CONSTRUCT 36" OD HDPE PIPE, DR-21 SEWER PIPELINE.
- CONSTRUCT 48" STEEL CASING, BY OPEN SHIELD PIPE JACKING AND PER DETAIL 2, SHEET 3.
- CONSTRUCT 36" VCP SEWER MAIN BY OPEN TRENCH METHOD PER DETAIL 3, SHEET 5.
- BACKFILL SEWER TRENCH FOR SEWER PIPE PER DETAIL 3, SHEET 5.
- CONNECT EXISTING SEWER.
- REMOVE AND REPLACE TO MATCH EXISTING.
- PROVIDE TEMPORARY PIPE SUPPORT PER LACSD STANDARD PLAN S-a-222.
- CONSTRUCT PIPE SUPPORT PER SSPWC STANDARD PLAN 224-2, CASE 3.
- PROVIDE TEMPORARY SUPPORT FOR EXISTING RC BOX, SEE SPECIFICATIONS.
- REROUTE EXISTING GAS MAIN, BY GAS CO.
- ABANDON EXISTING MANHOLE AND SEWER PIPING PER DETAIL 2, SHEET 5.
- REMOVE EXISTING SEWER MANHOLE.
- RECONSTRUCT EXISTING SERVICE CONNECTION PER SSPWC STANDARD PLAN 223-2, AND CONNECT TO NEW SEWER PER SSPWC STANDARD PLAN 222-2.
- BACKFILL WITH ONE-SACK SLURRY, INCLUDING TEMPORARY SHORING FOR LAUNCH/RECEIVING PIT. RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH.
- PROVIDE 36" FRAME AND COVER PER DETAIL 1, SHEET 4.
- CONSTRUCT VAULT/MANHOLE NO. 12 AND PARSHALL FLUME, PER DETAIL 1, SHEET 2.
- CONSTRUCT 4-FOOT DIAMETER MANHOLE NO. 13A PER DETAIL 3, SHEET 3.
- CONSTRUCT 6-FOOT DIAMETER DROP MANHOLE NO. 13B PER DETAIL 3, SHEET 3.
- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE FOR MANHOLE NOS. 6, 7, 8 AND 9, PER DETAIL 7, SHEET 4.
- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE DROP MANHOLE NO. 14. BACKFILL WITH ONE-SACK SLURRY. RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH. PROVIDE 36" FRAME AND COVER PER DETAIL 1, SHEET 4.
- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE FOR MANHOLE NOS. 15, 16, 17, 18 AND 19, PER DETAIL 7, SHEET 4.
- CONSTRUCT MANHOLE NO. 20 PER DETAIL 1, SHEET 3.
- CONSTRUCT 3" PVC SCH 80 CONDUIT, 24" COVER (MINIMUM) AND INSERT FLOW MONITOR CABLE TO MASTER CONTROLLER MODEM BEHIND CURB. FIELD LOCATE.
- MASTER CONTROLLER MODEM IN STREET CABINET BEHIND CURB, PROVIDED BY CITY. MASTER CONTROLLER MODEM AND CABLE IS FURNISHED BY THE CONTRACTOR, SEE SPECIFICATIONS.
- CONTRACTOR TO COORDINATE WITH CITY TO LOCATE EXISTING FUEL LINES.

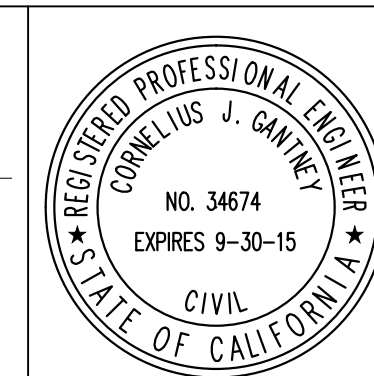
NOTES:  
1. SEE GENERAL NOTES ON SHEET 1, NOTE 23 FOR GEOTECHNICAL REPORT AND RECOMMENDATIONS.

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJ JOB No. 1283034.00



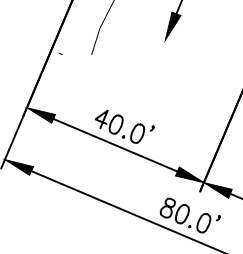
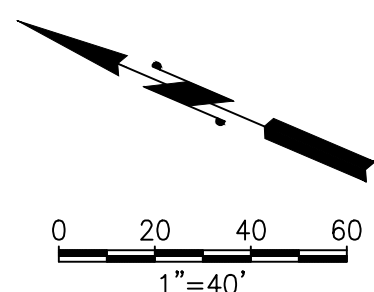
**CHEVY CHASE SEWER DIVERSION PROJECT**

**PLAN AND PROFILE**  
**STA 33+00 TO STA 39+00**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

**PLAN NO.**  
**3-1551**  
**SHEET 9 OF 10 SHEETS**



[illegible]

NOTES:  
1. SEE GENERAL NOTES ON SHEET 1, NOTE 23 FOR  
GEOTECHNICAL REPORT AND RECOMMENDATIONS.  
2. POT HOLE TO LOCATE EXIST FUEL LINES.

PLAN NO.  
3-1551  
SHEET 10 OF 10 SHEETS

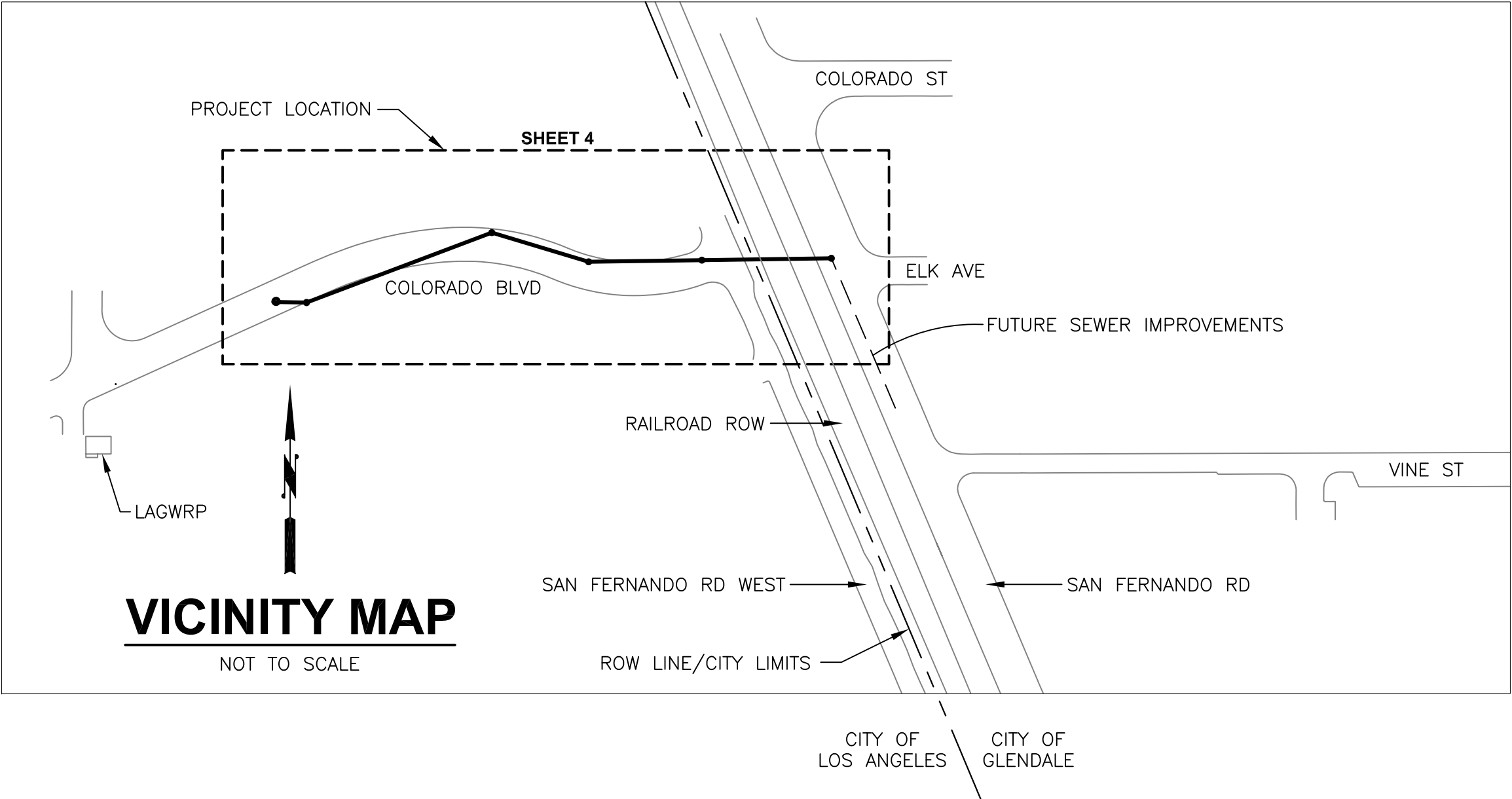
# COLORADO BOULEVARD WASTEWATER PROJECT IN THE CITY OF LOS ANGELES

## GENERAL NOTES

- ELEVATIONS SHOWN HEREON ARE IN FEET ABOVE THE U.S.G.S. DATUM PLANE.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREENBOOK" 2012 EDITION), AND STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC, 2012 EDITION), AND SPECIFICATIONS NO. 3445.
- STATIONING REFERS TO CENTER LINE OF SEWER TO BE CONSTRUCTED.
- UNDERGROUND UTILITIES ARE SHOWN SCHEMATICALLY ON THE PLANS. THE CONTRACTOR SHALL OBTAIN THE EXACT LOCATION OF THESE UTILITIES FROM THE RESPECTIVE OWNERS PRIOR TO ANY EXCAVATION WORK. LOCATION OF UTILITIES WITHIN THE PROJECT ARE ON FILE IN THE CITY ENGINEER'S OFFICE FOR REFERENCE. THE CONTRACTOR SHALL ALSO NOTE THAT FIELD MARKINGS MADE BY VARIOUS UTILITIES USING UNDERGROUND SERVICE ALERT (USA) SHALL BE CONSIDERED AS IDENTIFIED UTILITIES EVEN WHEN THEY ARE NOT SHOWN ON PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES DURING THE PROCESS OF THE WORK.
- CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN ERECT POSITIONS AND SET FRAME ORIENTATION IN PROPER POSITION PRIOR TO CLOSE OF THE JOB.
- THE FINISHED SURFACE OF ROADWAY SHALL CONFORM TO SECTIONS IN PLACE.
- THE CONTRACTOR SHALL VERIFY EXISTING SEWER LINE ELEVATIONS AT POINTS OF CONNECTION PRIOR TO BEGINNING CONSTRUCTION AND MAKE ANY NECESSARY CORRECTIONS TO ELEVATIONS.
- THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING STORM DRAINS AND WATER MAINS AS INDICATED ON THE PLANS BEFORE PERFORMING ANY SEWER RECONSTRUCTION WORK.
- THE CONTRACTOR SHALL POTHOLE ALL UTILITIES TO VERIFY DEPTH AND EXACT LOCATION OF UTILITY LINES.
- ALL EXISTING IMPROVEMENTS REMOVED OR DAMAGED SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER.
- ALL SEWER LINES AND MANHOLES SHALL BE CONSTRUCTED IN SUCH A MANNER THAT THE FLOW IN EXISTING LINES WILL BE INTERRUPTED ONLY AFTER AN ALTERNATE MEANS OF TRANSPORTATION (SEWER BYPASS PLAN) FOR THE FLOW HAS BEEN APPROVED BY THE ENGINEER.
- THE MANNER OF BRACING EXCAVATION IS SET FORTH IN THE RULES, ORDERS AND REGULATIONS OF THE CONSTRUCTION SAFETY ORDERS OF THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY. SHEET PILING AND OTHER TIMBERS SHALL BE REMOVED IN SUCH A MANNER AS TO PREVENT CAVING OF THE WALLS OF THE EXCAVATIONS.
- PIPE BEDDING SHALL BE CITY OF LOS ANGELES STANDARD PLAN S-251-1, UNLESS OTHERWISE NOTED.
- HDPE SEWER PIPE SHALL BE DR21 WITH FUSION BONDED JOINTS.
- PERMANENT TRENCH RESURFACING SHALL BE PER CITY OF LOS ANGELES STANDARD PLAN XXXXXX, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REMOVE AND REPLACE ANY EXCAVATED ASPHALT CONCRETE PAVEMENT OR PORTLAND CEMENT CONCRETE PAVEMENT WITH THE SAME PAVEMENT THICKNESS, BUT NOT LESS THAN 4-INCH.
- CONTRACTOR SHALL NOTIFY RESIDENTIAL PROPERTY OWNERS 72 HOURS AND BUSINESS ESTABLISHMENTS 96 HOURS PRIOR TO ANY CLOSURE OF THEIR EXISTING DRIVEWAYS OR ALLEYS.
- SAND SLURRY (1 SACK CEMENT PER CY) SHALL BE USED FOR TRENCH EXCAVATION PITS BACKFILL ON SAN FERNANDO RD AND COLORADO BLVD.

## RAILROAD CROSSING NOTES

- SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (SCRRA) IS NOT A MEMBER OF DIGALERT. THE CONTRACTOR SHALL CALL SCRRA'S SIGNAL DEPARTMENT AT (909) 592-1346 A MINIMUM OF FIVE DAYS PRIOR TO BEGINNING CONSTRUCTION TO MARK SIGNAL AND COMMUNICATION CABLES AND CONDUITS. TO ASSURE CABLES AND CONDUITS HAVE BEEN MARKED, NO WORK MAY PROCEED UNTIL YOU HAVE BEEN PROVIDED WITH AN SCRRA DIG NUMBER. IN CASE OF SIGNAL EMERGENCIES OR GRADE CROSSING PROBLEMS, THE CONTRACTOR SHALL CALL SCRRA'S 24-HOUR SIGNAL EMERGENCY NUMBER 1-888-446-9721.
- CONTACT SCRRA'S CONSULTANT/CONTRACTOR AT (213) 305-8424 TO ARRANGE FOR FLAGGING SERVICES. FLAGGING SERVICE IS DEPENDENT ON THE EMPLOYEE-IN-CHARGE (EIC) AVAILABILITY AND MAY REQUIRE A MINIMUM OF FIFTEEN WORKING DAYS PRIOR TO BEGINNING WORK. PRIOR NOTIFICATION OF FLAGGING SERVICES DOES NOT GUARANTEE THE AVAILABILITY OF THE EIC FOR THE PROPOSED DATE OF WORK.
- CONTACT SCRRA'S CONSULTANT/CONTRACTOR AT 1-877-452-0205 TO ARRANGE FOR THIRD PARTY SAFETY TRAINING. ALLOW 24 TO 72 HOURS FROM THE REQUEST FOR SAFETY TRAINING TO ARRANGE THE TRAINING.
- CONTRACTOR IS TO COMPLETE SCRRA'S TEMPORARY RIGHT OF ENTRY AGREEMENT, FORM 6. IF REAL ESTATE LICENSE THROUGH THE APPROPRIATE MEMBER AGENCY WILL BE NEEDED. IF SO, FORM 6 WILL NOT BE ISSUED UNTIL THE LICENSE AGREEMENT HAS BEEN ISSUED.
- BORING AND JACKING OF CASINGS AND OTHER CONDUITS MUST CONFORM TO THE REQUIREMENTS OF SCRRA ENGINEERING STANDARD PLANS ES 5001.
- FOR ANY CONDUIT THAT IS BORED OR JACKED UNDER THE TRACK, THE CONTRACTOR MUST GUARANTEE THE WORK AGAINST SETTLEMENT FOR TWO YEARS AFTER THE COMPLETION OF THE WORK, AND MUST FURNISH A PERFORMANCE BOND AGAINST FAILURE OR SETTLEMENT OF THE SOIL AROUND THE JACKED PIPE OR CASING IN THE AMOUNT OF \$225,000.00 AS PER SCRRA REQUIREMENTS SHOWN IN FORM 37.



## CITY OF LOS ANGELES STANDARD PLANS

PIPE LAYING IN TRENCHES	S-251-1
SUPPORT FOR STORM DRAIN AND SEWER PIPES ACROSS TRENCHES	S-253-0
TUNNEL AND JACKED CASING DETAILS	S-254-1
TYPES OF CURB AND GUTTER	S-410-2
DRIVEWAYS	S-440-3
BOE SPECIAL ORDER	015-1102
LA CITY BROWN BOOK	

## LOS ANGELES COUNTY SANITARY DISTRICT

STANDARD MANHOLE, TYPE "B"	S-o-206
STANDARD MANHOLE STEP	S-o-209
STANDARD PULL RING	S-o-220
STANDARD TEMPORARY PIPE SUPPORT	S-o-222

## SHEET INDEX

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	CIVIL/STRUCTURAL NOTES
SHEET NO. 3	CONSTRUCTION DETAILS
SHEET NO. 4	PLAN AND PROFILE STA 0+39 TO STA 9+54

## LEGEND

	NEW SEWER AND CASING		UNDERGROUND ELECTRIC
	TEMPORARY SHORING		UNDERGROUND TELEPHONE
	CURB LINE		UNDERGROUND GAS
	GUTTER LINE		UNDERGROUND SEWER
	FLOWLINE		UNDERGROUND STORM DRAIN
	FENCE		UNDERGROUND WATER
	FENCE		UNDERGROUND STREET LIGHT CONDUIT
	ROW LINE/CITY LIMIT		
	PROPERTY LINE		

## STANDARD LEGEND & ABBREVIATIONS

	SL=STREET LIGHT	ABAN	= ABANDONED
	ST. SIGN=STREET SIGN	AC	= ASPHALTIC CONCRETE
	EXISTING TREE	BCR	= BEGINNING CURB RETURN
	FH=FIRE HYDRANT	BC	= BEGINNING OF CURVE
	TS=TRAFFIC SIGNAL	BLVD	= BOULEVARD
	PPGW=POWER POLE GUY WIRE	BM	= BENCH MARKS
	PP/R=POWER POLE W/ RISER	BW	= BACK OF WALK
	PPSL=POWER POLE W/ STREET LIGHT	CAB	= CRUSHED AGGREGATE BASE
	PTTF=POWER TRANS. TOWER FOOTING	CMB	= CRUSHED MISC BASE
	TSPB=TRAFFIC SIGNAL PULL BOX	CB	= CATCH BASIN
	TSCB=TRAFFIC SIGNAL CONTROL BOX	CLA	= CITY OF LOS ANGELES
	SLPB=STREET LIGHT PULL BOX	CLS	= CITY OF LOS ANGELES
	SSMH=SANITARY SEWER MANHOLE	CF	= CURB FACE
	SDMH=STORM DRAIN MANHOLE	CFS	= CUBIC FEET PER SECOND
	WMH=WATER MANHOLE	CLF	= CHAIN LINK FENCE
	WV=WATER VALVE	CLSM	= CONTROLLED LOW STRENGTH MATERIAL
	WM=WATER METER	CMP	= CORRUGATED METAL PIPE
	4" CURB DRAIN	COG	= CITY OF GLENDALE
	EVLV=ELECTRICAL VAULT	DBL	= DOUBLE
	UPB=UTILITY PULL BOX	DIA	= DIAMETER
	TEL C BOX=TELEPHONE CONTROL BOX	DWY	= DRIVEWAY
	TMH=TELEPHONE MANHOLE	EC	= END OF CURVE
	GV=GAS VALVE	ECR	= END CURB RETURN
	PPS=OIL VALVE	EG	= EDGE OF GUTTER
	SOILS BORING LOCATION	EL	= ELEVATION
	DIRECTION OF SEWER FLOW	ELEC	= ELECTRIC
	W'y = WESTERLY	EP	= EDGE OF PAVEMENT
	E'y = EASTERLY	EXIST	= EXISTING
	N'y = NORTHERLY	FF	= FINISH FLOOR
	S'y = SOUTHERLY	FO	= FIBER OPTIC
	W/O = WEST OF	FS	= FINISH SURFACE
	E/O = EAST OF	FL	= FLOW LINE
	N/O = NORTH OF	GWP	= GLENDALE WATER & POWER
	S/O = SOUTH OF	HDPE	= HIGH DENSITY POLYETHYLENE
	W = WEST	HP	= HIGH POINT
	E = EAST	INV	= PIPE INVERT
	N = NORTH	LACSD	= LOS ANGELES COUNTY SANITARY DISTRICT
	S = SOUTH	LT	= LEFT
	C = CENTER LINE	LF	= LINEAR FEET
	C/L = CENTER LINE	MH	= MANHOLE
	P = PROPERTY LINE	MHCF	= MANHOLE COVER AND FRAME
	DETAIL NUMBER	MWD	= METROPOLITAN WATER DISTRICT
	SHEET NUMBER	OD	= OUTSIDE DIAMETER
		PCC	= PORTLAND CEMENT CONCRETE
		PROP	= PROPOSED
		PVMT	= PAVEMENT
		RC	= REINFORCED CONCRETE
		RCP	= REINFORCED CONCRETE PIPE
		RW	= RECLAIMED WATER
		RT	= RIGHT
		ROW	= RIGHT OF WAY
		SCG	= SOUTHERN CALIFORNIA GAS
		SCRRA	= SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
		SD	= STORM DRAIN
		SF	= SQUARE FEET
		SL	= STREET LIGHT
		SS	= SANITARY SEWER
		SSCO	= SEWER CLEANOUT
		SPPWC	= STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
		STA	= STATION
		STD	= STANDARD
		STL	= STEEL
		TC	= TOP OF CURB
		TYP	= TYPICAL
		VCP	= VITRIFIED CLAY PIPE
		WCR	= WHEELCHAIR CURB RAMP
		Wr	= RESIDENTIAL DRIVEWAY WIDTH
		Wc	= COMMERCIAL DRIVEWAY WIDTH

ADOPTED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF GLENDALE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2014

CITY CLERK CITY OF GLENDALE

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, Ca 91101  
626-568-4300

KJJ JOB No. 1283034.00



PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

**CITY OF GLENDALE**  
CALIFORNIA

**COLORADO BOULEVARD WASTEWATER PROJECT**  
**IN THE CITY OF LOS ANGELES**  
COLORADO BLVD. TO SAN FERNANDO RD.

SUBMITTED \_\_\_\_\_ APPROVED \_\_\_\_\_  
CIVIL ENGINEER II PRINCIPAL CIVIL ENGINEER

APPROVED \_\_\_\_\_ APPROVED \_\_\_\_\_  
TRAFFIC & TRANSPORTATION DIVISION

APPROVED \_\_\_\_\_ APPROVED \_\_\_\_\_  
GLENDALE WATER & POWER DEPARTMENT PUBLIC WORKS DEPARTMENT  
GENERAL MANAGER DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

DESIGNED BY: CJG

DRAWN BY: RJS

DATE: SEPTEMBER 2014

CHECKED BY: GBB

SCALE: AS SHOWN

PROJ. NO. SPECIFICATIONS NO. 3445  
FILE NAME:

**PLAN NO.**

**3-1561**

SHEET 1 OF 4 SHEETS



CIVIL NOTES

GENERAL

1. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COST TO OWNER.

2. CONTRACTOR SHALL ONLY USE RUBBER TIERED EQUIPMENT FOR CLEARING, GRUBBING, AND EXCAVATION ACTIVITIES.

3. ALL SOIL EXCAVATED FROM THE SITE, INCLUDING THE LAUNCH PIT, RECEIVING PIT AND THE JACK AND BORE UNSUITABLE SOILS MATERIAL SHALL BE PROPERLY DISPOSED OF OFF-SITE TO AN APPROVED LAND FILL. NEW BACKFILL SOIL SHALL BE IMPORTED IN ACCORDANCE WITH THE GREENBOOK, MECHANICALLY COMPACTED PER SECTION 396-1.3.2 OR CLSM OR TRENCH BACKFILL SLURRY (100E100) PER GREENBOOK TABLE 201-1.1.2. JETTING OF ANY KIND IS NOT PERMITTED. ALL COMPACTION SHALL BE 90% RELATIVE COMPACTION MINIMUM AND 95% RELATIVE COMPACTION PER SECTION 301-1.3.

4. THE PROJECT GEOTECHNICAL REPORT BY FUGRO CONSULTANTS DATED JUNE 4, 2013 IS HEREBY MADE A PART OF THIS PROJECT.

5. THE CONTRACTOR SHALL DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS OLD GUNITE, PIPING, ROCK RUBBLE ETC. AT AN APPROVED LANDFILL OR, OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.

6. CONTRACTOR SHALL HAVE A LICENSED LAND SURVEYOR PROPERLY RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO OWNER. PER GREEN BOOK SECTION 2-9.1.

7. ALL SHORING SHALL COMPLY WITH CAL-OSHA AND OSHA REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ALL SHORING SHALL BE DESIGNED BY THE CONTRACTOR'S FURNISHED PROFESSIONAL ENGINEER AND SUBMITTED TO THE CITY AND COUNTY FOR REVIEW AND APPROVAL PRIOR TO ANY EXCAVATION REQUIRING SHORING.

8. ALL SHORING IN CITY OF LOS ANGELES RIGHT-OF-WAY WILL REQUIRE CITY OF LA BOE PERMIT COUNTER REVIEW FOR APPROVAL BEFORE EXCAVATION.

9. CONTRACTOR SHALL DEMONSTRATE A SAFETY PROGRAM THAT ADDRESSES, AT A MINIMUM, THE FOLLOWING CALIFORNIA OCCUPATIONAL HEALTH AND SAFETY (CAL/OSHA) HEALTH AND SAFETY REQUIREMENTS:

a. 8 CCR 1541 (TITLE 8 CALIFORNIA CODE OF REGULATIONS-SECTION 1541) - 1541.1, EXCAVATION - INCLUDING A HEALTH AND SAFETY PLAN TO INCLUDE THE PRESENCE OF A COMPETENT PERSON, THE ABILITY TO OBTAIN AN EXCAVATION PERMIT, AND ALL OTHER ELEMENTS OF THE SAFETY REQUIREMENT..

b. 8 CCR 5156-5158, CONFINED SPACES - CONTRACTOR WILL COMPLY WITH ALL OSHA-RELATED CONFINED SPACE SAFETY REQUIREMENTS INCLUDING MONITORING, FORCED VENTILATION, AND PROVIDING APPROPRIATELY CERTIFIED PERSONNEL.

11. ADDITIONAL TITLE 8, CCR, REQUIREMENTS WHICH MAY BE REQUIRED:

a. GENERAL INDUSTRY SAFETY ORDERS, SECTION 5155, AIRBORNE CONTAMINANTS

b. CONSTRUCTION SAFETY ORDERS, SECTION 1528, DUSTS, FUMES, MISTS, GASES, VAPORS

c. TUNNEL SAFETY ORDERS, SECTION 8437, VENTILATION AND DUST CONTROL
- UTILITIES
1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN AND AROUND THE AREAS OF NEW CONSTRUCTION. THE CONTRACTOR SHALL POTHOLE FOR EXISTING UTILITIES PRIOR TO SUBMITTAL OF SHOP DRAWINGS, FOR POINTS OF CONNECTIONS. THE SUBMITTAL SHALL BE PREPARED BY THE CIVIL ENGINEER, PAID FOR BY THE CONTRACTOR.

2. THE CONTRACTOR SHALL PROTECT ALL REMAINING EXISTING UTILITIES.

3. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS AND ELEVATIONS AND SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT UTILITY LINES WHETHER SHOWN OR NOT SHOWN.

4. PRIOR TO ANY CONNECTION TO AN EXISTING UTILITY, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER.

5. PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY EXISTING UNDERGROUND FACILITIES, INCLUDING ALL WATER, SEWER, STORM DRAIN, GAS, OR OTHER PIPELINES: ALL BURIED ELECTRIC POWER, COMMUNICATIONS, OR TELEVISION CABLES, ALL TRAFFIC SIGNAL AND STREET LIGHTING FACILITIES; AND ALL ROADWAY, STATE HIGHWAY, AND RAILROAD RIGHTS-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE AUTHORITIES REPRESENTING THE OWNERS OR AGENCIES RESPONSIBLE FOR SUCH FACILITIES NOT LESS THAN 3 DAYS NOR MORE THAN 7 DAYS PRIOR TO EXCAVATION SO THAT A REPRESENTATIVE OF SAID OWNERS OR AGENCIES CAN BE PRESENT DURING SUCH WORK IF THEY SO DESIRE. IN THE CASE OF THE UNDERGROUND UTILITY SERVICE ALERT CENTER, THIS NOTICE WILL PROVIDE ADEQUATE TIME TO MARK THE LOCATION OF THE UTILITIES. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL OR LOCAL UNDERGROUND SERVICE ALERT COMPANY AT LEAST 3 DAYS, BUT NO MORE THAN 7 DAYS, PRIOR TO SUCH EXCAVATION.
- EROSION CONTROL
1. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN FOR WORK DURING THE CONSTRUCTION, SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

2. EROSION CONTROL SHALL USE ALL LA COUNTY DEPARTMENT OF PUBLIC WORKS BEST MANAGEMENT PRACTICES (BMPS) THAT APPLY.

3. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF EROSION CONTROL MEASURES CONTAINED WITHIN THE CONTRACT SPECIFICATIONS OR AS REQUIRED BY THE CITY, DISTRICT, OR OTHER REGULATORY AUTHORITY. THE CONTRACTOR SHALL ALSO PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES (E.G. HYDROSEEDING, MULCHING OF STRAW, SAND BAGGING, DIVERSION DITCHES, ETC.) DICTATED BY FIELD CONDITIONS TO PREVENT EROSION OR THE INTRODUCTION OF DIRT, MUD, OR DEBRIS INTO EXISTING PUBLIC STREETS, WATERWAYS, OR ONTO ADJACENT PROPERTIES DURING ANY PHASE OF CONSTRUCTION OPERATIONS.

4. FOR ALL EROSION CONTROL WORK WITHIN THE PUBLIC STREET, THE CITY OF LOS ANGELES"BROWN BOOK", SECTION 7-8.6 "WATER POLLUTION CONTROL"SHALL APPLY.

5. THE ENTIRE SITE IS LESS THAN 1.0 ACRE.
- PIPING
1. THE CONTRACTOR SHALL COMPLY WITH THE STATE DEPARTMENT OF HEALTH SERVICES CRITERIA FOR THE SEPARATION OF WATER MAINS, SANITARY SEWERS, AND STORM DRAINS.

2. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 INCHES OF COVER ON ALL PIPELINES WITHIN THE PROPERTY UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER.

3. SO 015-1102 DIRECTIONAL DRILLING REQUIREMENTS SHALL APPLY IN THE STREET RIGHT-OF-WAY. SEE JACK AND BORING NOTES FOR ADDITIONAL REQUIREMENTS. GREEN BOOK SECTION 306.2 SHAL APPLY.

4. STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERT ELEVATIONS SHOWN OR SPECIFIED.

5. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, PULL BOXES AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR SPECIFIED. APPROXIMATE RIM ELEVATIONS ARE SHOWN ON DRAWINGS.

6. THE CONTRACTOR SHALL EXCAVATE AND LOCATE EXISTING PIPING SHOWN TO CONNECT PRIOR TO SUBMITTING SHOP DRAWING. CONFLICT SHALL BE SENT TO THE ENGINEER FOR RESOLUTION PRIOR TO ORDERING ANY PIPELINE AND FITTINGS.

7. THE CONTRACTOR SHALL CONSTRUCT THE HDPE SOLID WALL SEWER PIPELINE PER GREEN BOOK SECTIONS 306-2, JACKING A STEEL CASING AND SECTION 500.3 ANNULAR SPACE GROUT, AS MODIFIED BY THE CITY BROWN BOOK, BOE SPECIAL ORDER 015-1102, S-251-1 AND S-254-1. IF ANY CONFLICTS WITH STANDARD PLANS, THE MOST STRINGENT SHALL BE APPLIED.

8. ALL SHORING SHALL BE REMOVED AND EXCAVATION FILLED AT BOTH LAUNCH AND RECEIVING PITS.

9. THE CONTRACTOR SHALL PROVIDE FOR CONTINUOUS SEWER FLOWS FOR THE EXISTING SERVICES AT ALL TIMES. AT NO TIME SHALL SEWAGE BE ALLOWED TO SPILL. THE CONTRACTOR SHALL COORDINATE THE NEW CONNECTIONS WITH THE CITY. THE CONTRACTOR SHALL PROVIDE A BY-PASS, IF NEEDED, SUITABLE TO THE CITY PRIOR TO ANY NEW CONTRACTOR WORK.
- JACK AND BORING NOTES
1. JACK AND BORING OPERATIONS SHALL COMPLY WITH THE CITY OF LOS ANGELES' STANDARD PLANS S-251-1, S-254-1 AND GREEN BOOK 306-2. IF THERE ARE ANY CONFLICTS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. ALL WORKERS PERFORMING THE JACKING AN BORING SHALL HAVE A MINIMUM EXPERIENCE OF 5 YEARS OF RECENT EXPERIENCE WITHIN THE LAST 10 YEARS DOING SIMILAR SIZE AND LENGTH WORK. A CERTIFICATE OF EXPERIENCE OF THE WORKERS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO ANY EXCAVATION OF THE JACK AND BORE PITS.

2. SUBMITTALS OF SHOP DRAWINGS AND CALCULATIONS REQUIRED AS A MINIMUM PER GREEN BOOK SECTION 306-2 AND CITY OF LOS ANGELES STANDARD PLAN S-254-1, MORE MAY BE REQUIRED.

A. DESIGN OF JACKING AND RECEIVING PIT INCLUDING BRACING, CASING AND JACKING HEAD.

B. CONCRETE MIX DESIGN, PLACEMENT METHOD AND EQUIPMENT TO BE USED.

C. WOOD SKIDS SPACERS WITH STEEL BANDS, PRESSURE CONCRETE MIX DESIGN, PLACEMENT METHOD AND EQUIPMENT TO BE USED.

D. METHODS OF TRANSPORTING PIPE IN CASING AND TUGGING THE PIPE THROUGH THE SLEEVE PIPE.

E. STEEL SLEEVE PIPE SHALL BE 36,000PSI YIELD STRENGTH PER ASTM-A36 WITH BUTT WELDED JOINTS, GROUND SMOOTH.

F. CARRIER PIPE SHALL BE DRISCO PLEX SOLID WALL HDPE CONFORMING TO GREEN BOOK SECTION 500-1.3 WITH FUSION WELDED JOINTS UNLESS OTHERWISE INDICATED. INSTALLATION SHALL CONFORM TO THE PIPE MANUFACTURES REQUIREMENTS.

4. GROUTING THE ANNULAR SPACE BETWEEN THE STEEL PIPE SLEEVE AND THE HDPE SEWER PIPE SHALL FOLLOW GREEN BOOK SECTION 500-3. THE GROUT MIX DESIGN SHALL BE F = 450 psi. THE GROUTING PRESSURE SHALL NOT EXCEED THE HDPE PIPE MANUFACTURER RECOMMENDATION, FOR DR-21, THE MAXIMUM GROUT PRESSURE IS 9.9 psi FOR UNCONSTRAINED PIPE.
- DEWATERING AND DISPOSAL OF CONTAMINATED GROUNDWATER
1. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR THE LOS ANGELES CITY BUREAU OF SANITATION (BOS) AND BUREAU OF ENGINEERING PLAN CHECK REVIEW, APPROVAL AND PERMIT. STEPS SHALL BE IDENTIFIED TO MINIMIZE THE VOLUME, TO MONITOR AND PRE-TREATED THE REMOVED WASTEWATER TO IMPROVE THE QUALITY OF DEWATERING EFFLUENT PRIOR TO DISPOSAL.

2. CONTRACTOR SHALL ENGAGE AN EXPERIENCED INSTALLER TO ASSUME ENGINEERING RESPONSIBILITY AND PERFORM DEWATERING WHO HAS SPECIALIZED IN INSTALLING DEWATERING SYSTEMS SIMILAR TO THOSE REQUIRED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

3. ACCOMPLISH DEWATERING WITHOUT DAMAGING EXISTING BUILDINGS AND UTILITIES ADJACENT TO EXCAVATION. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS.

4. CONTRACTOR SHALL SURVEY ADJACENT STRUCTURES AND IMPROVEMENTS, EMPLOYING A QUALIFIED PROFESSIONAL ENGINEER OR SURVEYOR, ESTABLISHING EXACT ELEVATIONS AT FIXED POINTS TO ACT AS BENCHMARKS. CLEARLY IDENTIFY BENCHMARKS AND RECORD EXISTING ELEVATIONS. DURING DEWATERING, RESURVEY BENCHMARKS WEEKLY, MAINTAINING AN ACCURATE LOG OF SURVEYED ELEVATIONS FOR COMPARISON WITH ORIGINAL ELEVATIONS. PROMPTLY NOTIFY ENGINEER IF CHANGES IN ELEVATIONS OCCUR OR IF CRACKS, SAGS, OR OTHER DAMAGE IS EVIDENT IN ADJACENT CONSTRUCTION.

5. PROVIDE AN ADEQUATE SYSTEM TO LOWER AND CONTROL GROUNDWATER TO PERMIT EXCAVATION, CONSTRUCTION OF STRUCTURES, AND PLACEMENT OF FILL MATERIALS ON DRY SUBGRADES. INSTALL SUFFICIENT DEWATERING EQUIPMENT TO DRAIN WATER-BEARING STRATA ABOVE AND BELOW BOTTOM OF FOUNDATIONS, PIPELINES, AND OTHER EXCAVATIONS.

6. BEFORE EXCAVATION BELOW GROUNDWATER LEVEL, CONTRACTOR SHALL PLACE SYSTEM INTO OPERATION TO LOWER WATER TO SPECIFIED LEVEL, A MINIMUM OF THREE FEET BELOW THE BOTTOM OF PLANNED EXCAVATIONS, AND THEN OPERATE IT CONTINUOUSLY UNTIL PIPELINES AND STRUCTURES HAVE BEEN CONSTRUCTED AND FILL MATERIALS HAVE BEEN PLACED, OR UNTIL DEWATERING IS NO LONGER REQUIRED.

7. CONTRACTOR SHALL MAINTAIN DEWATERING OPERATIONS TO ENSURE EROSION IS CONTROLLED, STABILITY OF EXCAVATIONS, CONSTRUCTED SLOPES ARE MAINTAINED, FLOODING OF EXCAVATION AND DAMAGE TO STRUCTURES AND UTILITIES ARE PREVENTED.

8. CONTRACTOR SHALL PREVENT SURFACE WATER FROM ENTERING EXCAVATIONS BY GRADING, DIKES, OR OTHER MEANS.

9. CONTRACTOR SHALL DISPOSE OF GROUNDWATER REMOVED FROM EXCAVATIONS IN A MANNER TO AVOID ENDANGERING PUBLIC HEALTH, PROPERTY, AND PORTIONS OF WORK UNDER CONSTRUCTION OR COMPLETED. PROVIDE SUMPS, SEDIMENTATION TANKS, OIL/WATER SEPARATORS AND OTHER FLOW-CONTROL DEVICES AS NEEDED. COMPLY WITH THE GROUNDWATER DISPOSAL REQUIREMENTS OF THE BOS AUTHORITIES HAVING JURISDICTION.

10. CONTRACTOR SHALL PROVIDE STANDBY EQUIPMENT ON-SITE, INSTALLED AND AVAILABLE FOR IMMEDIATE OPERATION, TO MAINTAIN DEWATERING ON A CONTINUOUS BASIS IF ANY PART OF SYSTEM BECOMES INADEQUATE OR FAILS. IF DEWATERING REQUIREMENTS ARE NOT SATISFIED DUE TO INADEQUACY OR FAILURE OF DEWATERING SYSTEM, RESTORE DAMAGED STRUCTURES AND FOUNDATION SOILS AT NO ADDITIONAL EXPENSE. IN ADDITION, PROMPTLY REPAIR DAMAGES TO ADJACENT FACILITIES CAUSED BY DEWATERING OPERATIONS.

11. CONTRACTOR SHALL REMOVE DEWATERING SYSTEM WHEN NO LONGER NEEDED AND RESTORE THE SITE TO THE ORIGINAL CONDITION.
- STRUCTURAL NOTES
- GENERAL
1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE STARTING WORK. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCY.
- SUBMITTALS
1. SUBMIT THE FOLLOWING FOR REVIEW AND APPROVAL BY THE ENGINEER:

a. CONSTRUCTION SEQUENCE.

b. ALL MATERIALS, PROCEDURES, SEWER REACH WHERE USED, SPECIAL SAFETY REQUIREMENTS, ALL EQUIPMENTS USED AND PROCEDURES.

c. MISCELLANEOUS SEWER REHABILITATION ITEMS: GROUT BULKHEADS, MH BLOCKOUTS, BLOCKOUT ATTACHMENTS, GROUT PORTS & ATTACHMENTS, PROPOSED CONSTRUCTION JOINTS, ETC, (PER NOTE 2)

d. SHORING FOR EXCAVATION OR BRACING OF EXISTING STRUCTURE (PER NOTE 2).

e. FALSEWORK (PER NOTE 2).

f. CONCRETE MIX DESIGNS (PER NOTE 2).

g. SHOTCRETE MIX DESIGNS (PER NOTE 2).

h. USE OF ADMIXTURES AND/OR CURING COMPOUNDS IN CONCRETE/GROUT MIX DESIGNS (PER NOTE 2).

i. METHOD OF CURING CONCRETE ELEMENTS

j. PIPE DESIGN AND CALCULATIONS TO VERIFY ADEQUACY TO WITHSTAND HANDLING, GROUTING, TRANSPORTATION, BEDDING, JACKING AND INSTALLATION LOADS, IN ADDITION TO DESIGN LOADS. (PER NOTE 2).

k. PIPE JOINTS AND CONNECTION DETAILS (PER NOTE 2).

l. PIPE JOINT QUALIFICATION TEST REPORTS (PER NOTE 2).

m. AS REQUESTED BY THE ENGINEER, OR REQUIRED BY THE CONTRACT, AT NO ADDITIONAL COST TO THE COUNTY.

2. THE SUBMITTAL ITEMS REFERRED TO THIS NOTE SHALL BE STAMPED AND PREPARED BY A CALIFORNIA REGISTERED CIVIL OR STRUCTURAL ENGINEER.
- CONCRETE REMOVAL
1. CONCRETE SHALL BE REMOVED AT THE LOCATIONS SHOWN ON THE PLANS WHERE NECESSARY TO PERFORM THE WORK OR WHERE DIRECTED BY THE ENGINEER. REMOVAL SHALL BE TO THE LIMITS SHOWN, SPECIFIED, OR DETERMINED BY THE ENGINEER. CARE SHALL BE TAKEN IN REMOVING THE CONCRETE TO PROVIDE CLEAN AND SOUND PLANES AS INDICATED ON THE PLANS.

2. CONCRETE REMOVAL OPERATIONS SHALL BE PERFORMED WITHOUT DAMAGE TO ANY PORTION THAT IS TO REMAIN IN PLACE. ANY DAMAGE TO THE EXISTING CONCRETE, WHICH IS TO REMAIN IN PLACE, SHALL BE REPAIRED, AT NO ADDITIONAL COST TO THE CITY, TO A CONDITION EQUAL TO THAT EXISTING PRIOR TO BEGINNING REMOVAL OPERATIONS AND IS SUBJECT TO APPROVAL BY THE ENGINEER.

3. BEFORE BEGINNING CONCRETE REMOVAL OPERATIONS INVOLVING THE REMOVAL OF A PORTION OF A MONOLITHIC CONCRETE ELEMENT, A SAW CUT APPROXIMATELY ONE-INCH DEEP SHALL BE MADE TO A TRUE LINE ALONG THE LIMITS OF REMOVAL ON ALL FACES OF THE ELEMENT WHICH WILL BE VISIBLE IN THE COMPLETED WORK.

4. WHERE SAWCUTTING IS REQUIRED AND WHERE THE REINFORCING MUST REMAIN INTACT, MAKE A SAWCUT ONE-INCH DEEP AT THE REMOVAL LINE(S). THE SAWCUT SHALL NOT EXTEND BEYOND THE REMOVAL LIMITS. ADJACENT TO THE SAWCUT ON THE SIDE TO BE REMOVED, CUT A GROOVE IN THE CONCRETE TO THE DEPTH OF THE SAWCUT WITH A CHIPPING HAMMER. AT CORNERS AND AREAS NOT ACCESSIBLE TO SAWCUTTING, CUT A ONE-INCH DEEP GROOVE IN THE CONCRETE AT THE REMOVAL LINE WITH A CHIPPING HAMMER. REMOVE THE REMAINING CONCRETE WITH HAND OPERATED EQUIPMENT IN A CAREFUL MANNER LEAVING A CLEAN PLANE SURFACE. CARE SHALL BE TAKEN NOT TO DAMAGE THE REINFORCEMENT TO BE RETAINED. REINFORCING STEEL CUT THAT WAS SHOWN TO BE RETAINED SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE CITY. REPAIR METHOD SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

5. REINFORCING STEEL CUT DURING THE SAWCUTTING OPERATION SHALL BE REMOVED TO A DEPTH OF 1 INCH FROM THE PLANE SURFACE. COAT BAR AND FILL REMAINING CONCRETE VOID WITH A NON-SHRINK, CORROSION INHIBITING POLYMER MODIFIED GROUT.
- CONCRETE
1. CONCRETE MIX DESIGNS SHALL BE SPECIFIED BY EITHER CLASS OR STRENGTH AND SHALL BE STAMPED AND PREPARED BY A CALIFORNIA REGISTERED CIVIL OR STRUCTURAL ENGINEER.

2. FOR CONSTRUCTION BELOW GRADE AND IN AREAS IN CONTACT WITH LIQUIDS, ALL HOLES AND FORM TIE HOLES SHALL BE FILLED WITH AN APPROVED WATERPROOF EPOXY GROUT OR NON-SHRINK GROUT, UNO. HOLES SHALL BE FILLED AFTER THE REMOVAL OF ALL FORM CLAMPS, BOLTS AND OTHER HARDWARE.

3. EXPOSED EDGES AND CORNERS SHALL BE CHAMFERED 3/4".

4. THE LOCATION OF ALL CONSTRUCTION AND OTHER TYPES OF JOINTS, OTHER THAN THOSE SPECIFIED OR SHOWN ON THE PLANS, SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING CONCRETE.

5. ALL EXISTING CONCRETE SURFACES IN CONTACT WITH NEW CONCRETE AND ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED TO MINIMUM 1/4"AMPLITUDE.
- SOILS AND FOUNDATIONS
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY FUGRO WEST, DATED JUNE 4, 2013 AND ALL SUPPLEMENTS THERETO. THE ABOVE REFERENCED SOILS REPORT AND RECOMMENDATIONS CONTAINED THEREIN ARE TO BE FOLLOWED AND SHOULD BE CONSIDERED MINIMUM REQUIREMENTS, UNLESS MORE STRINGENT REQUIREMENTS ARE PRESENTED IN SPECIFICATIONS OR CONTAINED HEREIN.

2. THE CITY OF LA, BOE GEOTECHNICAL ENGINEERING GROUP SHALL INSPECT AND APPROVE ALL EXCAVATIONS WITHIN THE CITY RIGHT OF WAY, PRIOR TO POURING OF CONCRETE, SHORING INSTALLATIONS, BACKFILL MATERIALS, AND BACKFILLING PROCEDURES. CALL THE GEOTECHNICAL ENGINEERING GROUP FOR ALL NECESSARY INSPECTIONS AT (213)847-0535 AT LEAST TWO WORKING DAYS PRIOR TO THE REQUIRED INSPECTION.

3. THE CONTRACTOR SHALL SUBMIT SHORING AND DEWATERING PLANS AND CALCULATIONS FOR THE ENGINEER'S APPROVAL IN ACCORDANCE WITH THE SPECIFICATIONS. THE SHORING PLANS AND DETAILS SHALL BE SUBMITTED WITH DETAILED CALCULATIONS, AND PREPARED BY A CALIFORNIA REGISTERED CIVIL OR STRUCTURAL ENGINEER. SUBMITTAL SHALL STIPULATE SEQUENCE OF INSTALLATION AND REMOVAL.

4. SHORING DESIGN SHALL CONFORM TO THE LA TEST REFERENCE ST-ANDARDS TO THE MATERIAL BEING CONSIDERED AS LISTED IN THE LATEST LOS ANGELES BUILDING CODE, INCLUDING REFERENCED DOCUMENTS FOR THE DESIGN OF STEEL (AISC) AND TIMBER (NDS).

5. FOR STEEL OR TIMBER MEMBERS USED IN SHORING SYSTEMS WHERE THE USE OF THE SYSTEM EXCEEDS 90 DAYS, AN ALLOWABLE STRENGTH INCREASE OF 1/3 SHALL NOT BE APPLIED. SEE CAL TRANS TRENCH AND SHORING MANUAL PAGE 5-21 AND CHAPTER 12 FOR ADDITIONAL RESTRICTIONS ON THE USE OF A 1/3 OVERSTRENGTH INCREASE. CONTRACTOR SHALL COMPLY.

6. THE GEOTECHNICAL ENGINEERING GROUP SHALL REVIEW AND APPROVE THE SHORING AND/OR UNDERPINNING PRIOR TO START OF CONSTRUCTION.

7. DISTANCE OF SHORING PILES FROM THE EXISTING UTILITIES, INCLUDING SEWERS & STORM DRAINS PIPE SHALL BE SUFFICIENT TO AVOID DAMAGING THE PIPE, DISTURBING ITS BEDDING, OR IMPOSING LOAD ON THE PIPE. AS A MINIMUM, THE EDGE OF THE DRILLED PILE-HOLE SHALL BE AT LEAST 3 TIMES ITS DIAMETER OR 5 FEET, WHICHEVER IS GREATER, AWAY FROM THE EXTERIOR OF THE PIPE.

8. UNLESS A MORE STRINGENT LIMIT IS REQUIRED BY THE PROJECT GEOTECHNICAL ENGINEER OF RECORD, THE MAXIMUM ALLOWABLE HORIZONTAL DEFLECTION FOR CANTILEVER SHORING SYSTEMS, OR CANTILEVER PORTIONS OF ALL SHORING SYSTEMS, SHALL BE 1/2".
- PIPES
1. THE REQUIRED PIPES UNDER THIS CONTRACT HAVE BEEN DESIGNED BASED ON FINAL IN-PLACE CONDITIONS. IT IS THE CONRACTOR'S RESPONSIBILITY TO ENSURE THE REQUIRED PIPES CAN ACCOMMODATE TEMPORARY HANDLING, TRANSPORTATION AND CONSTRUCTION LOADS.

2. INCREASE PIPE STRENGTH AS NECESSARY FOR CONSTRUCTION STRESSES INDUCED BY LOADS FROM CONSTRUCTION ACTIVITIES SUCH AS INSTALLATION, BEDDING, GROUTING, JACKING, HANDLING, TRANSPORTATION, ETC.

3. ALL PIPE JOINT SYSTEMS SHALL BE CAPABLE OF WITHSTANDING EXTERNAL WATER PRESSURES AS REQUIRED BY THE "DESIGN HYDROSTATIC HEAD". WHEN NO HEIGHT IS LISTED, REFER TO THE CONTRACT DOCUMENTS FOR INFORMATION. THE GREATER HEIGHT LISTED SHALL GOVERN. FIELD TEST ALL JOINTS OCCURRING BELOW GROUNDWATER TABLE IN ACCORDANCE WITH ASTM C1103 (PRECAST CONCRETE PIPE), OR APPROVED EQUAL.

4. JOINTS:

a. TYPE FOR OTHERS: AS SHOWN ON CONTRACT DOCUMENTS OR AS APPROVED BY THE ENGINEER.

b. PRIOR TO PIPE FABRICATION, SUBMIT JOINT DETAILS, LISTING NORMAL CLOSURE GAP WIDTH, INCLUDING MAXIMUM WIDTH FOR PULLED JOINT. MAXIMUM GAP WIDTH SHALL CONFORM TO THE LIMITS OF THE DEPARTMENT OF PUBLIC WORKS "BROWN BOOK", LA TEST EDITION.

c. CONDUCT FIELD TESTING OF PIPELINE IN ACCORDANCE WITH SSPWC SECTION 306-1.4.

d. SEE CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

e. ALL PIPE JOINT SYSTEMS AND JOINT QUALIFICATION TEST REQUIREMENTS SHALL BE IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS FOR- PUBLIC WORKS (SSPWC) AND MANUFACTURER'S RECOMMENDATION.

5. PIPE CONNECTION AT STRUCTURES

a. PROVIDE CONNECTOR PIPE WITH FLEXIBLE JOINT AT ALL STRUCTURES. LENGTH SHALL BE NO LESS THAN 18-INCHES NOR GREATER THAN 30-INCHES, UNO. SEE REQUIREMENTS ABOVE FOR JOINTS REQUIRED TO SUSTAIN A DESIGN HYDROSTATIC HEAD.

6. JOINTING OF PIPES DISSIMILAR IN SIZE OR MATERIAL SHALL BE ACCOMPLISHED EITHER BY USE OF A JUNCTION STRUCTURE OR BY THE USE OF SPECIAL ADAPTERS OR COUPLINGS AS INDICATED BY THE ENGINEER FOR SUCH USE. ALL FIELD-CUT PIPE SHALL BE ACCOMPLISHED BY METHODS AND EQUIPMENT RECOMMENDED BY THE PIPE MANUFACTURER. HOWEVER, NO HAMMER AND CHISEL CUTS WILL BE PERMITTED.

7. THE CONTRACTOR SHALL IMPLEMENT ACTIVE CONTINUOUS CONTROLS TO MITIGATE ANY IMPACT DUE TO THE HEAT OF HYDRATION CAUSED BY CEMENTITIOUS BACKFILL/GROUTING, SUCH AS THE USE OF MULTIPLE LIFTS, TEMPERATURE CONTROL OF THE GROUT COMPONENTS PRIOR TO MIXING, MAINTAINING THE UPPER BOUND OF THE GROUT COMPRESSIVE STRENGTH WITHIN THE SPECIFIED VALUE, ETC.

8. THE CONTRACTOR SHALL INSTALL CASE 5 BEDDING IN LIEU OF THE BEDDING DESIGNATED ON THE PLANS WHEN ANY PORTION OF THE PROPOSED SEWER FALLS WITHIN A TUNNEL/MICROTUNNEL/JACKING SHAFT AREA. FOR WIDE PORTIONS OF A TRENCH EXCAVATION WHICH EXCEED THE STANDARD MAXIMUM TRENCH WIDTH, PERMITTED BY "TABLE A" OF STANDARD PLAN S-251, THE CASE BEDDING SHALL BE INCREASED PER "TABLE B" OF STANDARD PLAN S-251. PROVIDE 1" THICK PREFORMED BITUMINOUS EXPANSION JOINT FILLER EXTENDING THE ENTIRE WIDTH AND HEIGHT OF ENCASEMENT PER STANDARD PLAN S-140.

9. PROVIDE THE REQUIRED TESTING DATA AS STIPULATED UNDER SSPWC 207-17 THROUGH 207-22, AND SECTION 500 FOR PIPE ACCEPTANCE EXCEPT AS MODIFIED BY THE BROWN BOOK, LA TEST EDITION, AND THE FOLLOWING:

a. DELIVERY OF PIPE SHALL NOT COMMENCE UNTIL ALL THE REQUIRED VERIFICATION DATA HAS BEEN SUBMITTED AND APPROVED.

b. TESTING DATA SHALL BE FOR THE PARTICULAR PIPE BEING PROVIDED AND NOT ARCHIVED DATA UP TO 24 MONTHS OLD. IT SHALL BE SUBMITTED AS A FORMAL DOCUMENT WITH RESULTS FROM EACH TEST ON A SEPARATE SHEET(S). INCLUDE LABORATORY INFORMATION ALONG WITH SIGNED STATEMENT OF CERTIFICATION FROM AUTHORIZED INSPECTOR THAT WITNESSED THE TESTS. PROVIDE CONTACT INFORMATION OF THIRD PARTY INSPECTOR WHEN ONE IS USED.

c. RESULTS FROM PARALLEL PLATE TEST PER 02412 MAY BE USED TO FULFILL ITEM 2). "INITIAL FLEXURAL MODULUS (0790)", OF THE TESTING DATA REQUIREMENTS OF 207-20, 207-22 PER THE BROWN BOOK. REPORT AT 5% DEFLECTION.

d. RESULTS FROM BARCOL IMPRESSOR PER D2583 MAY BE USED TO FULFILL ITEM 4), "IMPACT STRENGTH (ASTM D256) OR SHORED HARDNESS (ASTM D2240)", OF THE TESTING DATA REQUIREMENTS OF 207-20,207-22 PER THE BROWN BOOK.

e. RESULTS FROM HOOP & AXIAL COMPRESSION TESTING IN ACCORDANCE WITH D695.

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJJ JOB No. 1293034.00

A circular professional engineer seal for the State of California. The outer ring contains the text "REGISTERED PROFESSIONAL ENGINEER" at the top and "STATE OF CALIFORNIA" at the bottom. Inside the ring, the name "CORNELIUS J. GANLEY" is written in a curve. In the center, it says "NO. 34674", "EXPIRES 9-30-15", and "CIVIL" at the bottom.

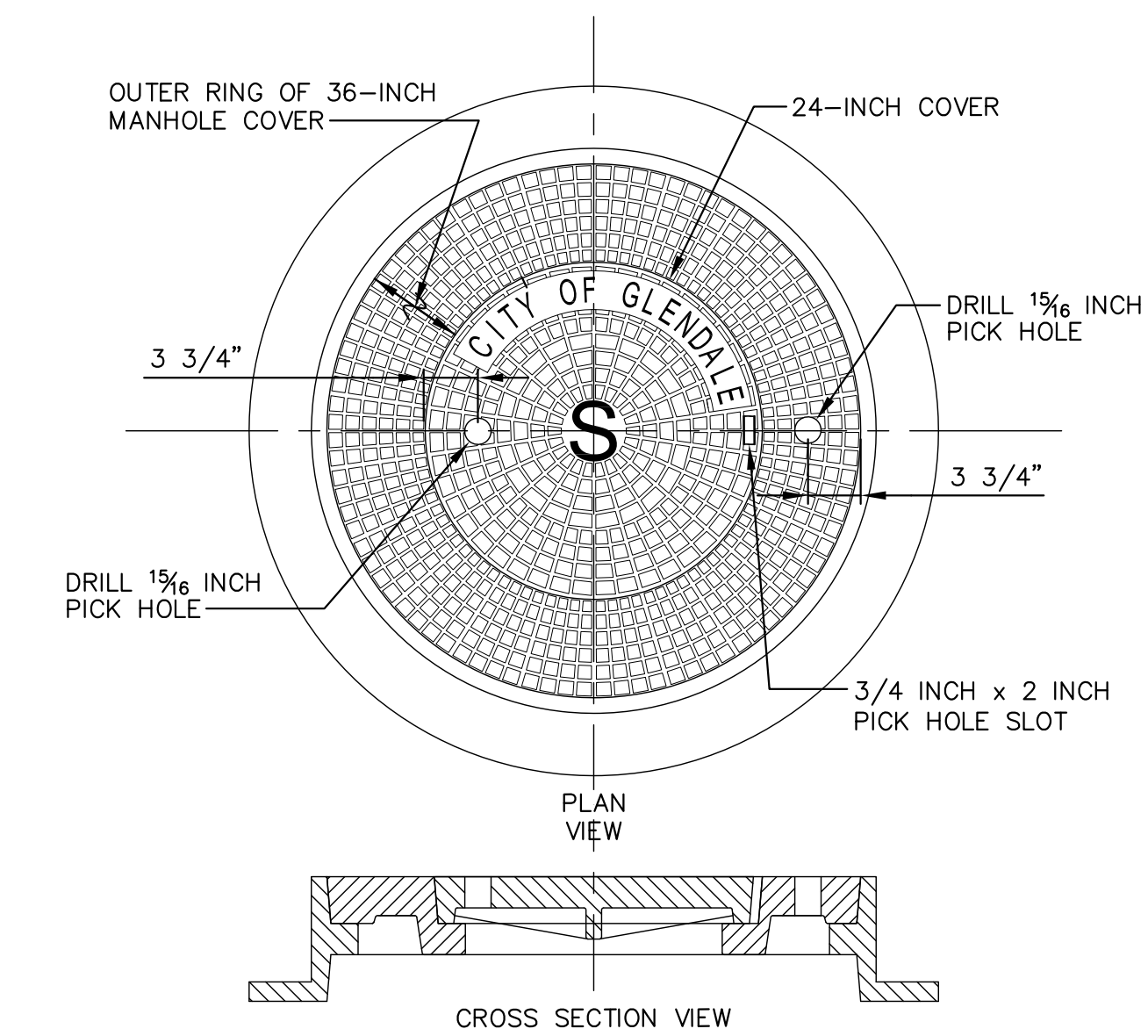
COLORADO BOULEVARD WASTEWATER PROJECT  
IN THE CITY OF LOS ANGELES

CIVIL/STRUCTURAL NOTES

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

PLAN NO.  
**3-1561**  
SHEET 2 OF 4 SHEETS

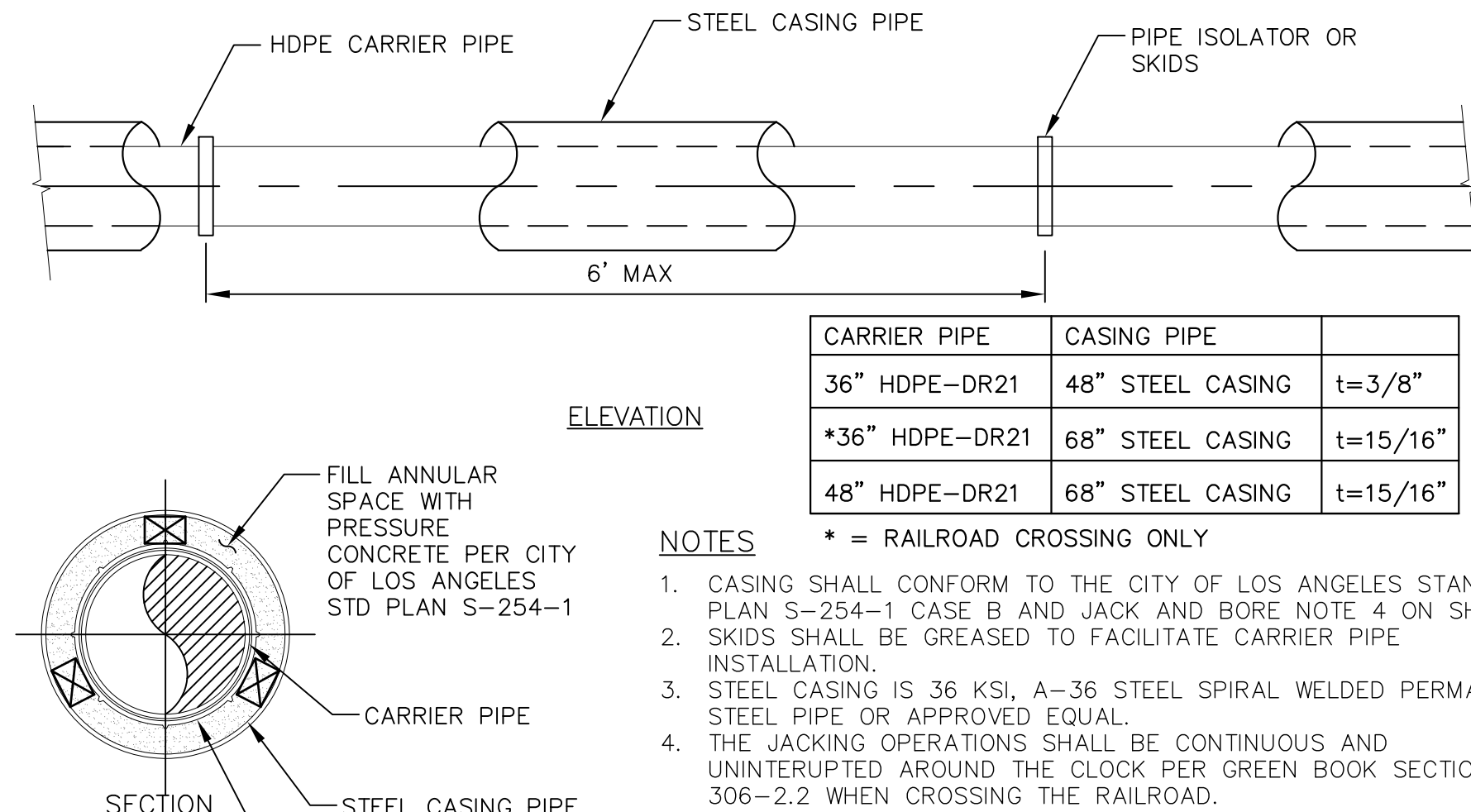




#### NOTES

- MANHOLE COVER AND FRAME (MHCF) SET: ALHAMBRA FOUNDRY 36-INCH MANHOLE COVER AND FRAME 3-PIECE SET, PLAN NO. A-1325 OR APPROVED EQUAL AND REVISED AS SHOWN HEREON.
- ALL PARTS TO BE MANUFACTURED IN THE USA.
- MHCF 3-PIECE SET FOR 5-FOOT DIAMETER MANHOLES ONLY OR LARGER SIZE MH.

**MANHOLE COVER** (2/3)  
SCALE: NONE

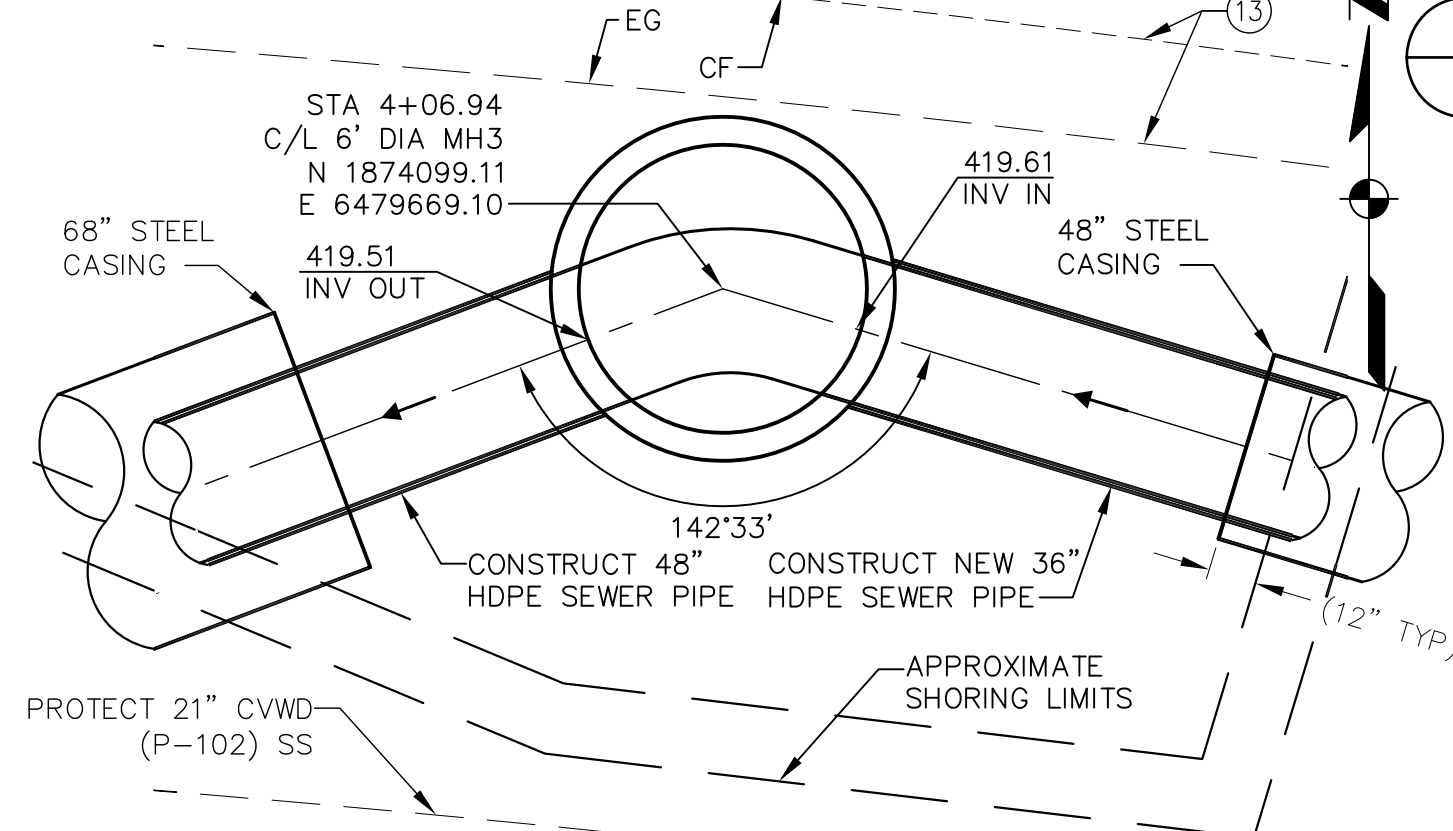


**STEEL CASING DETAIL** (3/3)  
SCALE: NONE

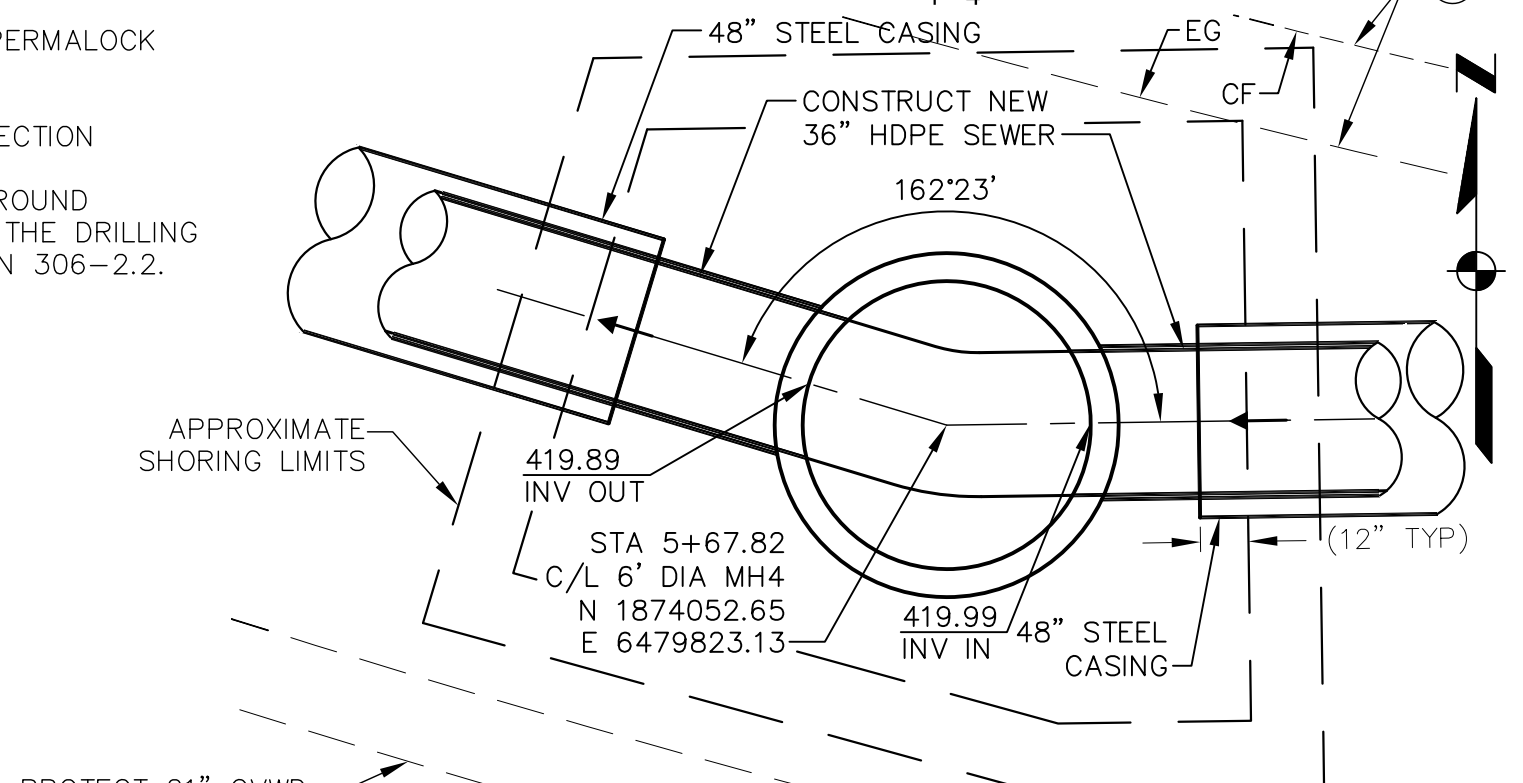
#### NOTES

- CASING SHALL CONFORM TO THE CITY OF LOS ANGELES STANDARD PLAN S-254-1 CASE B AND JACK AND BORE NOTE 4 ON SHEET 2.
- SKIDS SHALL BE GREASED TO FACILITATE CARRIER PIPE INSTALLATION.
- STEEL CASING IS 36 KSI, A-36 STEEL SPIRAL WELDED PERMALOCK STEEL PIPE OR APPROVED EQUAL.
- THE JACKING OPERATIONS SHALL BE CONTINUOUS AND UNINTERRUPTED AROUND THE CLOCK PER GREEN BOOK SECTION 306-2.2 WHEN CROSSING THE RAILROAD.
- THE CONTRACTOR SHALL PROVIDE A MONITORING FOR GROUND SURFACE MOVEMENT TRACKING PLAN AND DISPOSAL OF THE DRILLING FLUIDS, SLURRIES AND SPOILS PER GREEN BOOK SECTION 306-2.2.
- SEE PLAN FOR CASING AND CARRIER PIPE SIZES

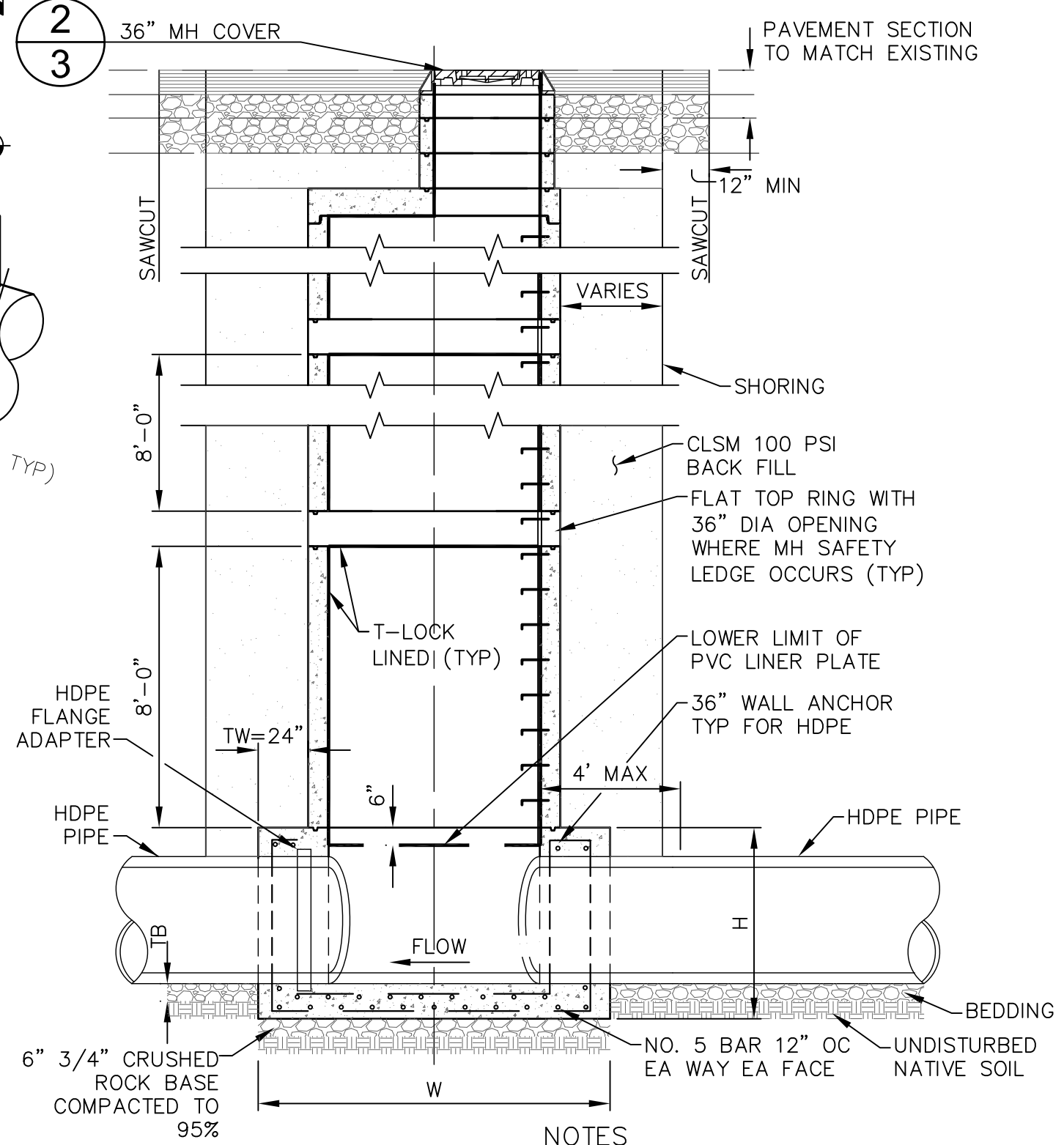
\* = RAILROAD CROSSING ONLY



**MH3 BASE DETAIL** (4/3)  
SCALE: NONE



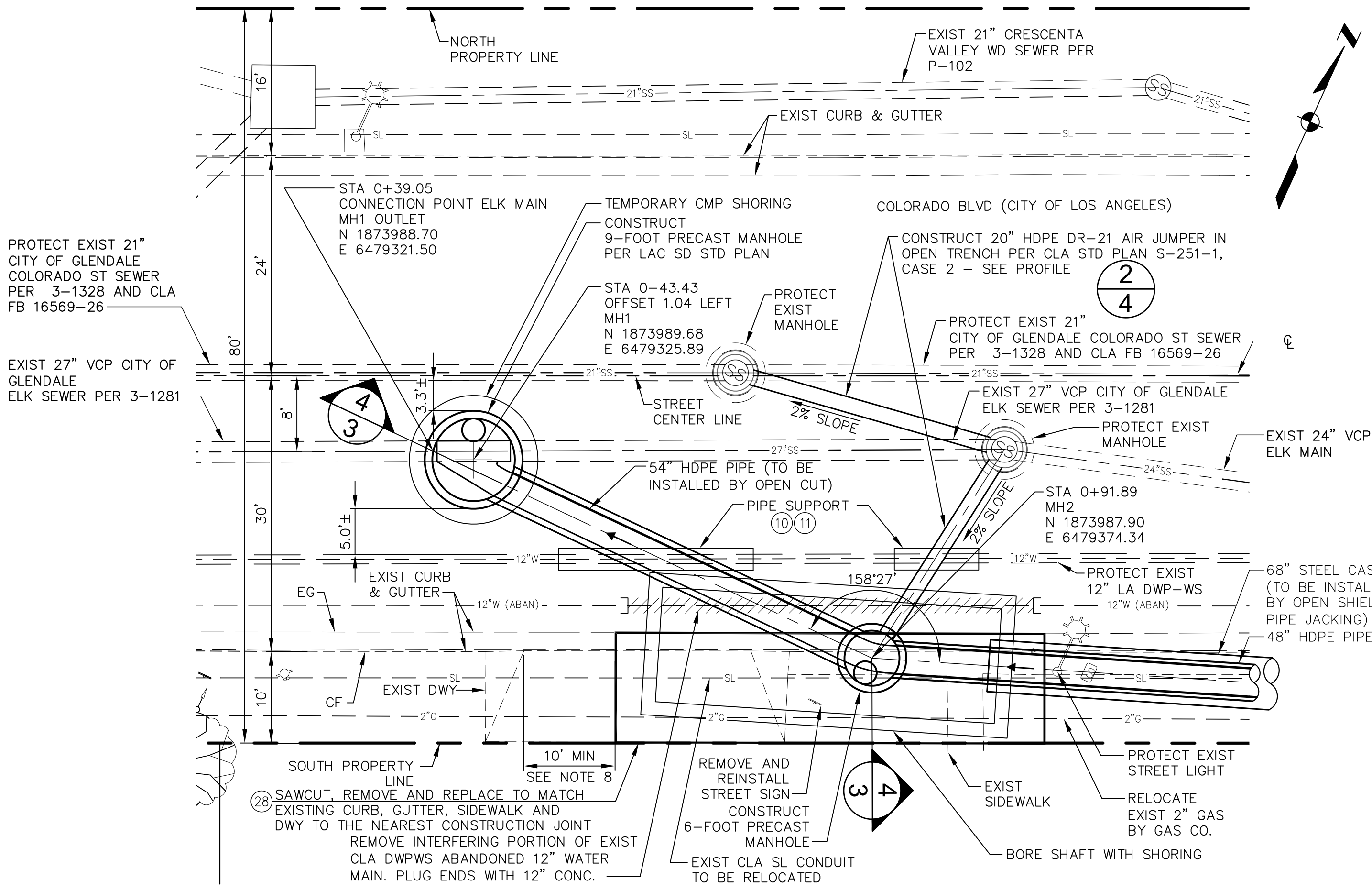
**MH4 BASE DETAIL** (5/3)  
SCALE: NONE



**TYPICAL 6-FOOT MANHOLE DETAIL** (6/3)  
SCALE: NONE

#### NOTES

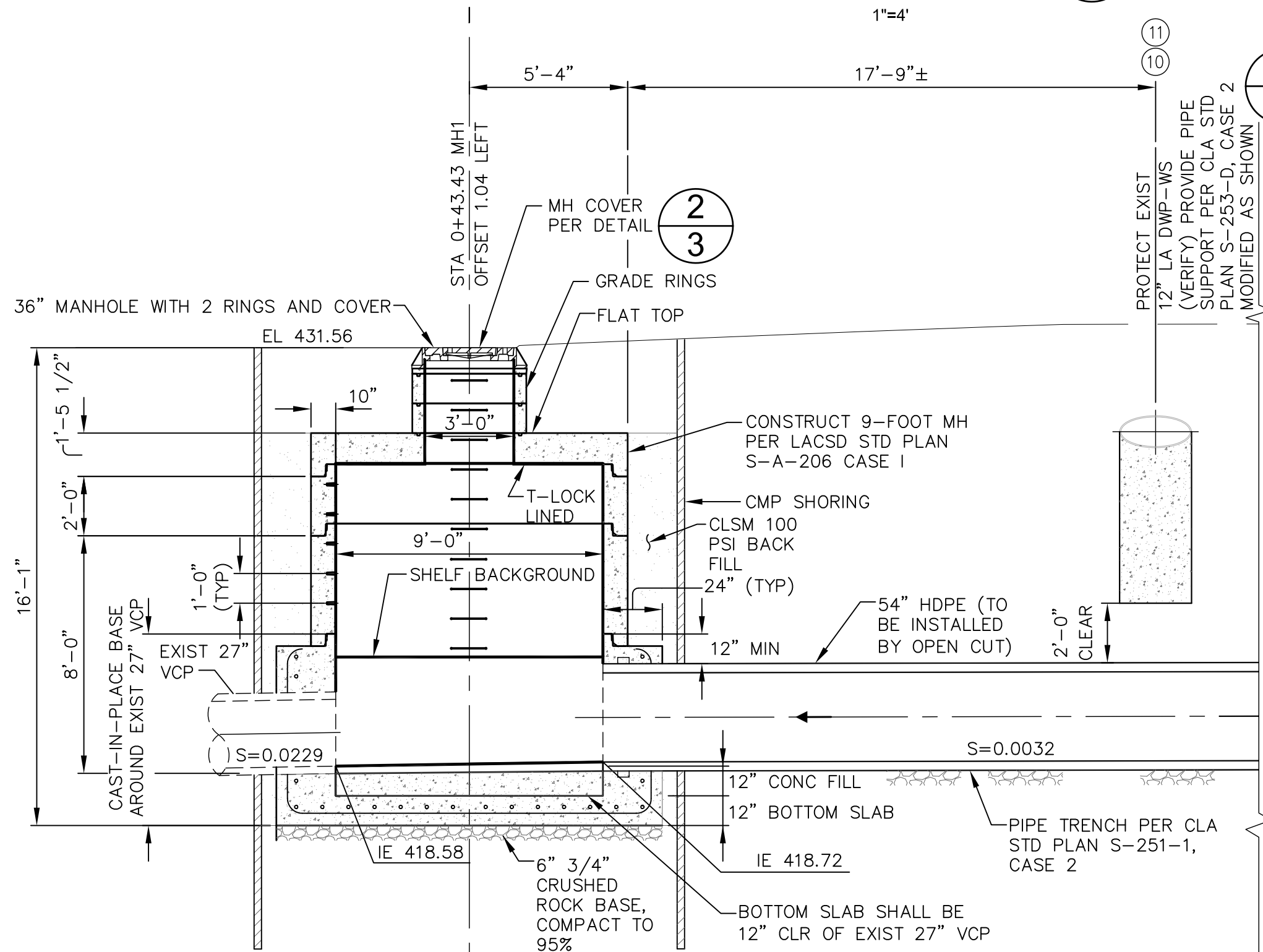
- LACSD STANDARD MANHOLE, TYPE "E" PER S-2-206, CASE 1. IS MODIFIED AS INDICATED IN THIS DETAIL.
- PROVIDE MANHOLE SAFETY LEDGE PER APWA STANDARD PLAN 330-2 FOR ALL MANHOLES WHERE DEPTH TO SHELF IS GREATER THAN 20'.
- PROVIDE ASPHALT TAPE SEALANT AT ALL PRECAST JOINTS.



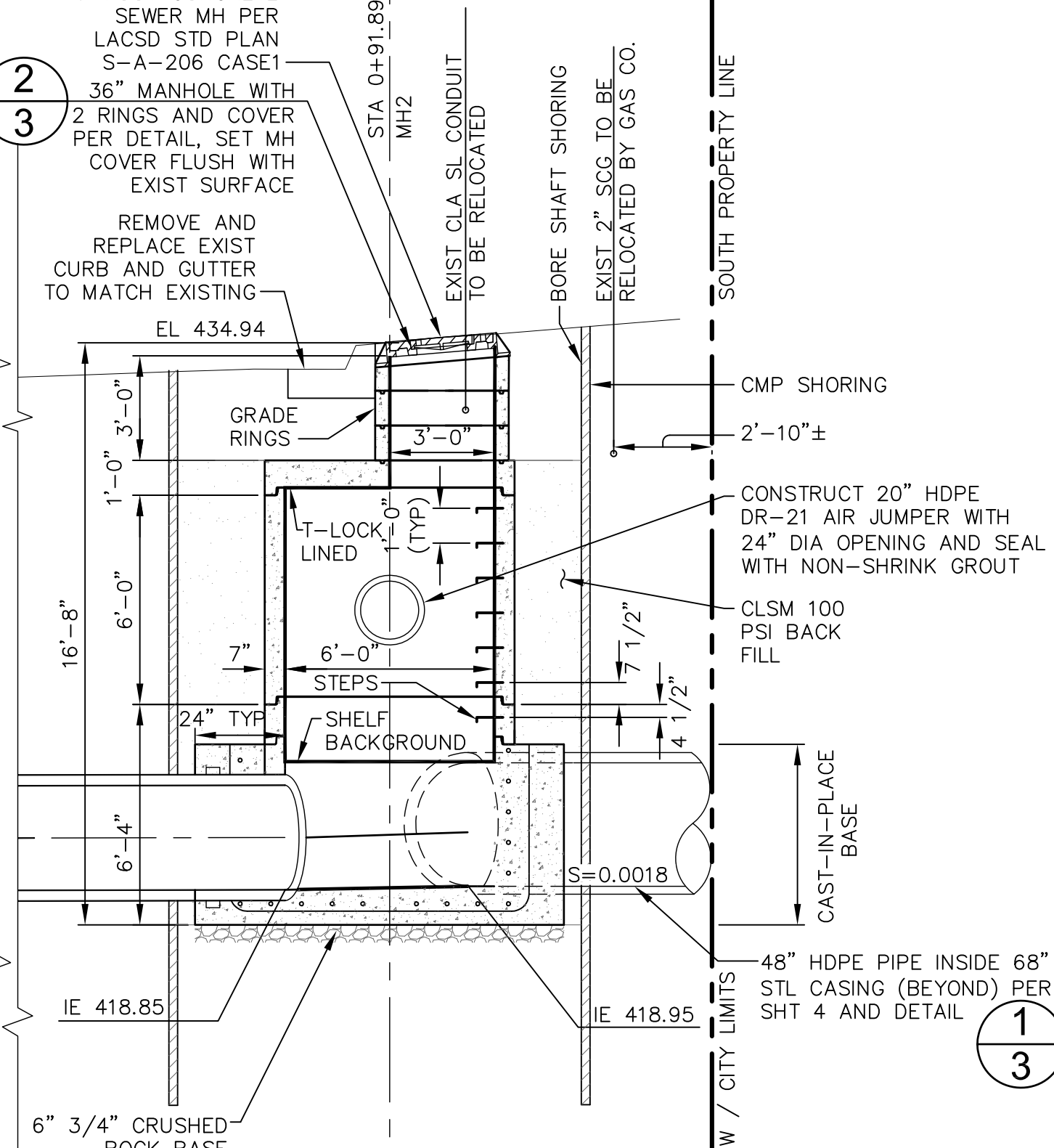
**MANHOLE DETAIL AT STA 0+39.05 COLORADO BLVD** (1/3)  
SCALE: NONE

#### NOTES

- CONTRACTOR SHALL PROVIDE BY-PASS PLAN TO CITY AS A SUBMITTAL, PRIOR ANY CONSTRUCTION WORK. INTERNAL BY-PASSING IS PREFERRED.
- THE CONTRACTOR SHALL PROVIDE SHORING AS NEEDED TO PERFORM THE WORK, SEE GENERAL NOTES.
- THE EXISTING STREET LIGHT CONDUIT SHOWN "TO BE RELOCATED BY THE CITY OF LA" PRIOR TO INSTALLING THE SHORING SHALL BE COORDINATED WITH THE CONTRACTOR'S SHORING.
- WORK WITHIN THE CITY OF LOS ANGELES SHALL COMPLY WITH THE CITY OF LOS ANGELES' PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH THE CITY OF LOS ANGELES' PERMIT REQUIREMENTS.
- CONCRETE FILL USED IN SHELFS SHALL HAVE SHRINKAGE REINFORCING STEEL USING #5 BARS AT 12" OC EACH WAY AT OUTSIDE FACE.
- THE MANHOLE ACCESS SHAFT SHALL BE 36" DIAMETER WITH MATCHING OPENING ON TOP OF SLAB.
- MAINTAIN MINIMUM 10' DRIVEWAY ACCESS AT ALL TIME.



**MANHOLE 1**



**MANHOLE 2**

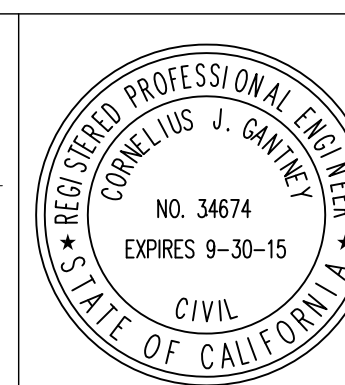
**SECTION** (4/3)  
SCALE: NONE

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJJ JOB No. 1293034.00



COLORADO BOULEVARD WASTEWATER PROJECT  
IN THE CITY OF LOS ANGELES

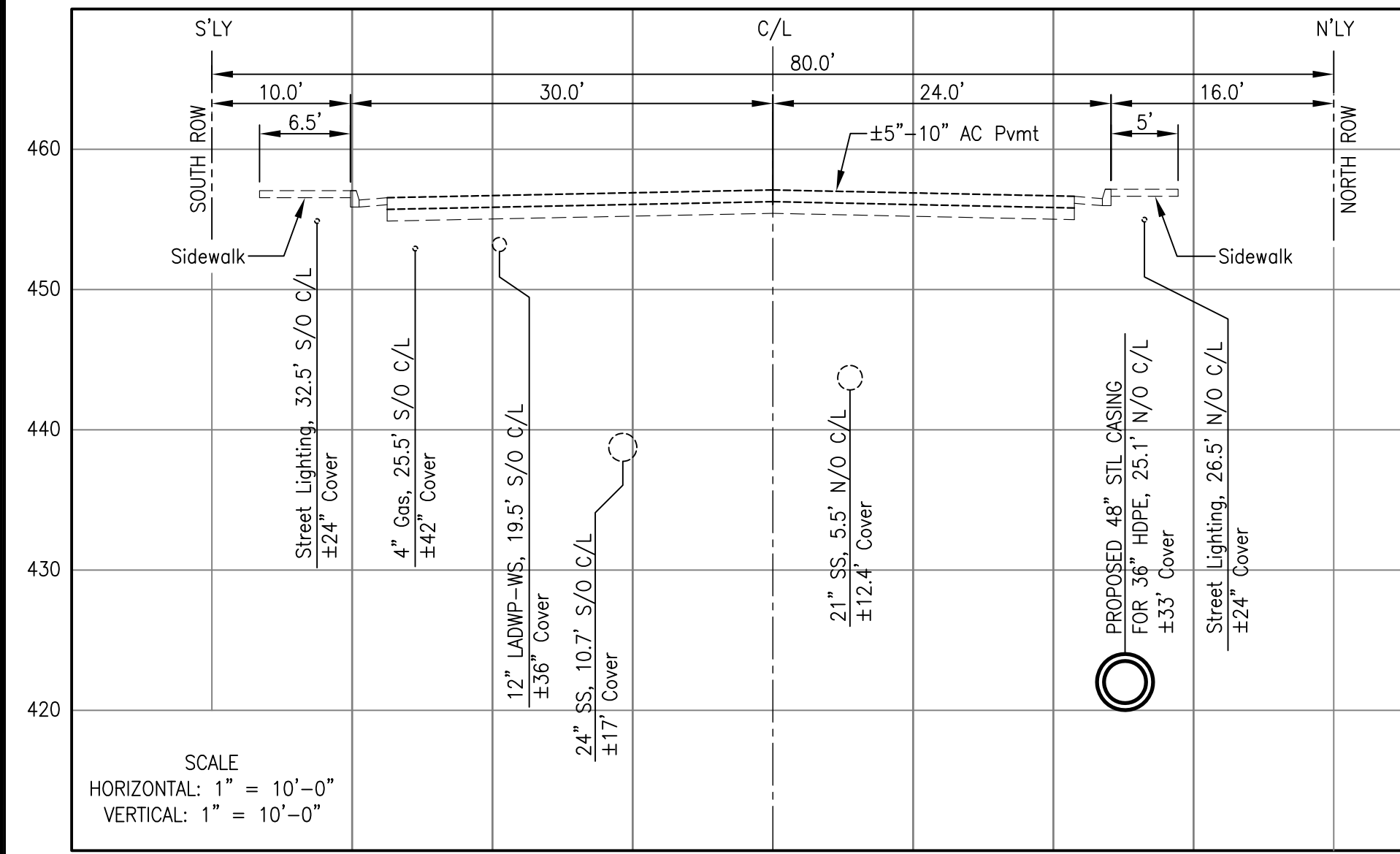
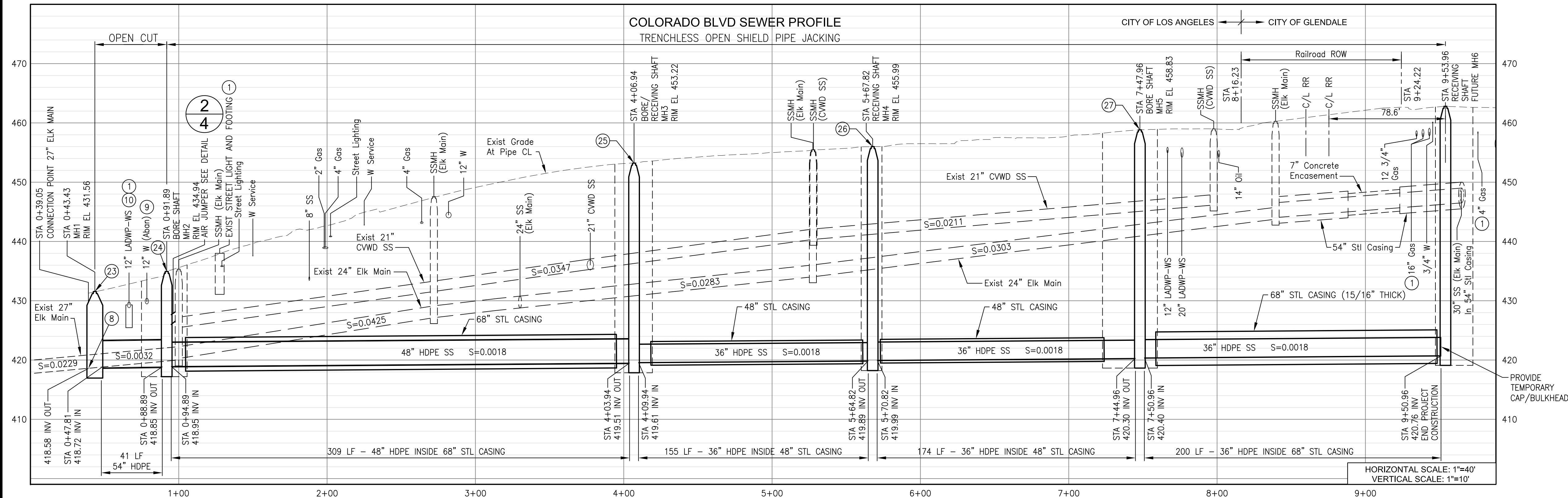
**CONSTRUCTION DETAILS**

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

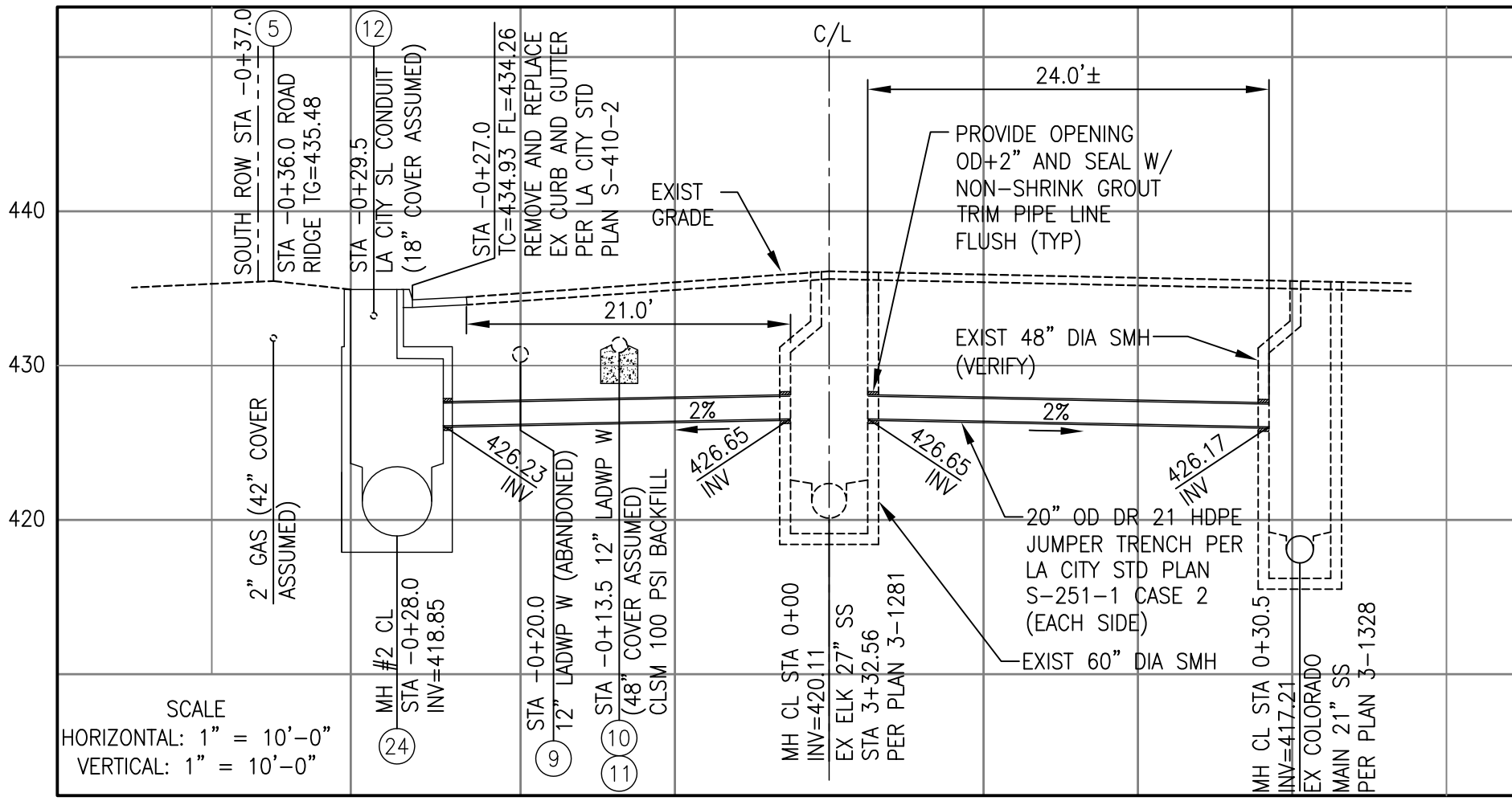
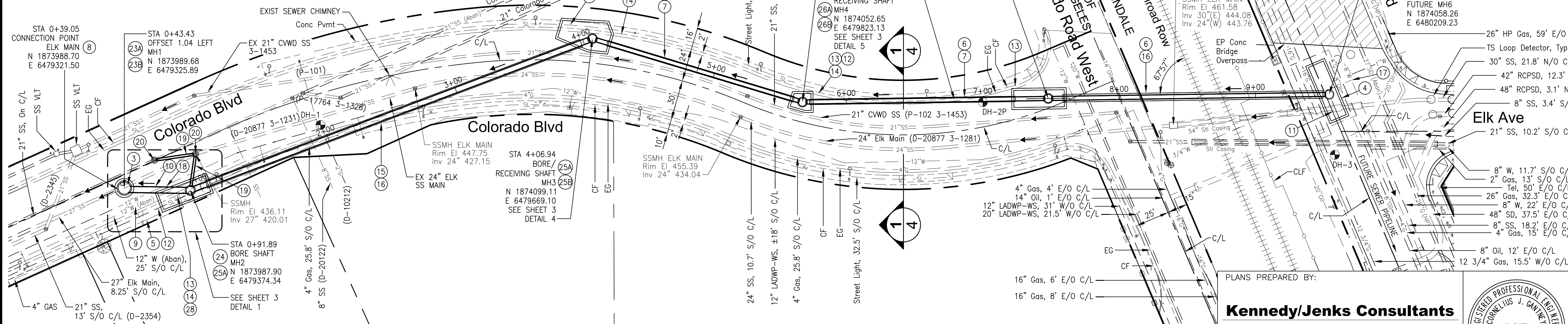
PLAN NO.  
**3-1561**  
SHEET 3 OF 4 SHEETS



# COLORADO BLVD SEWER PROFILE TRENCHLESS OPEN SHIELD PIPE JACKING



1 CROSS-SECTION AT STA 6+42  
4 COLORADO BLVD



2 AIR JUMPER PROFILE  
4

BENCH MARKS	
BM 2485 SAN FERNANDO RD. WEST & COLORADO BLVD. SPK. IN LEAD @ BACK OF E'LY CURB SAN FERNANDO RD. WEST @ S'LY SIDE OF BRIDGE CHSLD. "BM"	460.38
BM 2486 COLORADO BLVD. OPPOSITE ADDRESS # 4550 GEAR SPIKE IN N'LY CURB COLORADO BLVD. @ END OF SIDEWALK	441.43
BM 2487 COLORADO BLVD. & EDENHURST AVE. NAIL IN LEAD IN E'LY CURB EDENHURST AVE. IN N'LY HEADWALL OF C.B. 20.8 FT. N/O ECR N/E'LY CORNER CHSLD "BM"	421.73

## CONSTRUCTION NOTES

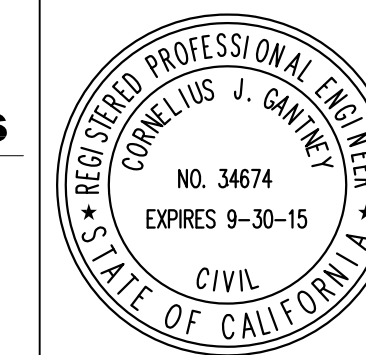
- PROTECT EXISTING UTILITIES IN PLACE.
- NOT USED.
- REMOVE INTERFERING PORTION OF EXISTING SEWER.
- CONSTRUCT TEMPORARY SHORING FOR RECEIVING SHAFT.
- 4" OR 2" GAS TO BE RELOCATED BY GAS COMPANY.
- CONSTRUCT 36" OD HDPE, DR-21 SEWER PIPELINE PER DETAIL 3, SHEET 3.
- CONSTRUCT 48" STEEL CASING, 3/8" THICK PER DETAIL 3, SHEET 3.
- CONNECT TO EXISTING SEWER.
- REMOVE INTERFERING PORTIONS OF EXISTING 12" ABANDONED WATERMAIN. PLUG REMAINING ENDS WITH 12" CONCRETE.
- CONSTRUCT MODIFIED PIPE SUPPORT PER CITY OF LOS ANGELES STANDARD PLAN 253-0, CASE 2. SEE DETAIL 2, SHEET 4.
- CONSTRUCT TEMPORARY PIPE SUPPORT PER LACSD STD PLAN S-a-222.
- TEMPORARILY REROUTE THE EXISTING STREET LIGHT WIRE AND CONDUIT TO CLEAR THE WORK AREA. RESTORE THE STREET LIGHT CONDUIT TO WORKING ORDER AND PROVIDE NON-TRAFFIC PULL BOXES AND 2" PVC CONDUIT TO REINSTALL THE STREET LIGHTS IN ACCORDANCE WITH THE CITY OF LOS ANGELES PERMIT REQUIREMENTS.
- SAWCUT, REMOVE AND REPLACE TO MATCH EXISTING CURB AND GUTTER TO THE NEAREST CONSTRUCTION JOINT, PER CITY OF LOS ANGELES STANDARD PLAN S-410-2, TYPE C, IN ACCORDANCE WITH THE CITY OF LOS ANGELES PERMIT REQUIREMENTS.
- SAWCUT, REMOVE AND REPLACE TO MATCH EXISTING SIDEWALK TO THE NEAREST CONSTRUCTION JOINT, PER CITY OF LOS ANGELES STANDARD PLAN S-410-2, TYPE C, IN ACCORDANCE WITH THE CITY OF LOS ANGELES PERMIT REQUIREMENTS.
- CONSTRUCT 48" OD HDPE, DR-21 SEWER PIPELINE PER DETAIL 3, SHEET 3.
- CONSTRUCT 68" OD STEEL CASING, 15/16" THICK PER DETAIL 3, SHEET 3.
- REROUTE EXISTING WATER SERVICE TO CLEAR THE WORK AREA AND SEWER MANHOLE.
- CONSTRUCT 54" OD HDPE, DR-21 SEWER PIPE IN OPEN TRENCH PER CITY OF LOS ANGELES STANDARD PLAN S-251-1, CASE 2, AND IN ACCORDANCE WITH THE CITY OF LOS ANGELES PERMIT REQUIREMENTS.
- CONSTRUCT 20" OD HDPE, DR-21 AIR JUMPER PIPELINE. SEE DETAIL 2, SHEET 4.
- BREAK INTO EXISTING SEWER MANHOLE AND CONNECT AIR JUMPER PIPELINE. SEAL PIPELINE CONNECTION WITH NON SHRINK GROUT, 1 INCH MINIMUM ALL AROUND. TRIM PIPELINE FLUSH WITH MANHOLE WALL.
- NOT USED.
- REMOVE AND REPLACE TO MATCH EXISTING.
- CONSTRUCT 9-FOOT DIAMETER MANHOLE NO. 1 PER DETAIL 1, SHEET 3.
- CONSTRUCT 6-FOOT DIAMETER MANHOLE NO. 2 PER DETAIL 1, SHEET 3.
- CONSTRUCT TEMPORARY SHORING FOR RECEIVING/BORE SHAFT UPON SHORING REMOVAL. BACKFILL SPACE WITH 100 PSI CLSM.
- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE NO. 3. BACKFILL WITH 100 PSI CLSM, INCLUDING TEMPORARY SHORING FOR BORE AND RECEIVING SHAFT. RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH. PROVIDE 36" FRAME AND COVER PER DETAILS 2 AND 6, SHEET 3.
- CONSTRUCT TEMPORARY SHORING FOR RECEIVING/BORE SHAFT UPON SHORING REMOVAL. BACKFILL SPACE WITH 100 PSI CLSM.
- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE NO. 4. TEMPORARY SHORING FOR RECEIVING SHAFT. BACKFILL WITH 100 PSI CLSM. RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH. PROVIDE 36" FRAME AND COVER PER DETAILS 2 AND 6, SHEET 3.
- CONSTRUCT TEMPORARY SHORING FOR RECEIVING/BORE SHAFT UPON SHORING REMOVAL. BACKFILL SPACE WITH 100 PSI CLSM.
- CONSTRUCT 6-FOOT DIAMETER PRECAST CONCRETE MANHOLE NO. 5. BACKFILL WITH 100 PSI CLSM, INCLUDING TEMPORARY SHORING FOR DOUBLE BORE SHAFT RESTORE PAVEMENT TO MATCH EXISTING PLUS 1 INCH. PROVIDE 36" FRAME AND COVER PER DETAIL 2 AND 6, SHEET 3.
- SAWCUT, REMOVE AND REPLACE TO MATCH EXISTING DRIVEWAY, PER CITY OF LOS ANGELES STANDARD PLAN S-440-3, TYPE C, IN ACCORDANCE WITH THE CITY OF LOS ANGELES PERMIT REQUIREMENTS.

PLANS PREPARED BY:

**Kennedy/Jenks Consultants**

300 N. Lake Ave, Suite 1020  
Pasadena, CA 91101  
626-568-4300

KJJ JOB No. 1293034.00



COLORADO BOULEVARD WASTEWATER PROJECT  
IN THE CITY OF LOS ANGELES

PLAN AND PROFILE  
STA 0+39.00 TO STA 9+54.00

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
CITY OF GLENDALE  
CALIFORNIA

PLAN NO.  
**3-1561**  
SHEET 4 OF 4 SHEETS